AEMnet

29 bit, 500 kBit/sec, 8 data bytes per message unless otherwise specified
Multi-byte data is packed big endian (Motorola format, most significant byte transmitted first)
Bits numbered MSB first, with the MSB = bit7, LSB = bit0

Both unit types (SI & US) should be made available to the customer whenever possible!

Message ID: 0x01F0A000 Sources: Infinity EMS (30-71XX) AEM S2 & EMS-4 (30-6XXX) 20ms continuous (50hz)

Byte	Bit	Bitmask	Label	Data Type
0-1			Engine Speed	16 bit unsigned
2-3			Engine Load (Deprecated in Infinity) Use "MAP" in 0x01F0A004 Instead	16 bit unsigned
4-5			Throttle	16 bit unsigned
6			Intake Air Temp	8 bit signed, 2's comp
7			Coolant Temp	8 hit signed 2's comp

Contained in CAN DBC Files*:		AEM INFINITY SI 20 AEM EMS-V2 SI 201 AEM EMS-4 SI 2016 SI Units (C / kP.	61128.dbc
Scaling	Offset	Range	DBC Unit Type
0.39063 rpm/bit	0	0 to 25,599.94 RPM	angular_speed:rpm
0.0015259 %/bit	0	0 to 99.998 %	fraction:%
0.0015259 %/bit	0	0 to 99.998 %	fraction:%
1 Deg C/bit	0	-128 to 127 C	temperature:C
1 Deg C/bit	0	-128 to 127 C	temperature:C

	Contained in CAN DBC Files*:		AEM Infinity US 20161025.dbc AEM EMS-V2 US 20161128.dbc AEM EMS-4 US 20161128.dbc		
			US Units (F / F	SI / MPH / AFR)	
	Scaling	Offset	Range	DBC Unit Type	
	<==	<==	<==	<==	
1	<==	<==	<==	<==	
1	<==	<==	<==	<==	
]	1.8 Deg F/bit	32	-198.4 to 260.6 F	temperature:F	
1	1.8 Deg F/bit	32	-198.4 to 260.6 F	temperature:F	

Message ID: 0x01F0A001 Sources: AEM S2 & EMS-4 (30-6XXX)

20ms continuous (50hz)							
Byte	Bit	Bitmask	Label	Data Type			
0-1			ADCR11	16 bit unsigned			
2-3			ADCR13	16 bit unsigned			
4-5			ADCR14	16 bit unsigned			
6-7			ADCR17	16 bit unsigned			

Contained i	n CAN DBC File*:	AEM EMS-V2 SI 2016 AEM EMS-4 SI 2016	
		SI Units (C / kPa / kph / Lambda)	
Scaling	Offset	Range	DBC Unit Type
0.00007782 V/bit	0	0 to 5.0999 V	voltage:V
0.00007782 V/bit	0	0 to 5.0999 V	voltage:V
0.00007782 V/bit	0	0 to 5.0999 V	voltage:V
0.00007782 V/bit	0	0 to 5.0999 V	voltage:V

Contained in C	AN DBC File*:	AEM EMS-V2 US 2016 AEM EMS-4 US 2016 US Units (F/F	
Scaling	Offset	Range	DBC Unit Type
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==

Message ID: 0x01F0A002 Sources: AEM S2 & EMS-4 (30-6XXX)

20ms continuous (50hz)								
Byte	Bit	Bitmask	Label	Data Type				
0-1			ADCR18	16 bit unsigned				
2-3			ADCR15	16 bit unsigned				
4-5			ADCR16	16 bit unsigned				
6-7			ADCR08	16 bit unsigned				

Contained in	CAN DBC File*:	AEM EMS-V2 SI 201 AEM EMS-4 SI 2016		
		SI Units (C / kPa / kph / Lambda)		
Scaling	Offset	Range	DBC Unit Type	
0.00007782 V/bit	0	0 to 5.0999 V	voltage:V	
0.00007782 V/bit	0	0 to 5.0999 V	voltage:V	
0.00007782 V/bit	0	0 to 5.0999 V	voltage:V	
0.000326 V/bit	0	0 to 21.3644 V	voltage:V	

Contained in C		AEM EMS-V2 US 20161128.dbc AEM EMS-4 US 20161128.dbc	
		US Units (F/F	SI / MPH / AFR)
Scaling	Offset	Range	DBC Unit Type
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==

Message ID: 0x01F0A003 Sources: Infinity EMS (30-71XX) AEM S2 & EMS-4 (30-6XXX)

20ms continuous (50hz)						
Byte	Bit	Bitmask	Label	Data Type		
0			Lambda #1	8 bit unsigned		
1			Lambda #2	8 bit unsigned		
2-3			Vehicle Speed	16 bit unsigned		
4			Gear Calculated	8 bit unsigned		
5			Ign Timing	8 bit unsigned		
6-7			Battery Volts	16 bit unsigned		

0.00390025 Lambda/bit 0.5 0.5 to 1.496 Lambda af 0.00390025 Lambda/bit 0.5 0.5 to 1.496 Lambda af 0.0062865 kph/hit 0 0 to 411.986 km/h spec 1.0002865 kph/hit 0 0 to 411.986 km/h spec 3.5145 Deg/bit -17 0 to 255 unini 3.5145 Deg/bit -17 -17 to 7.265 Deg angl	Contained in (CAN DBC Files*:	AEM INFINITY SI 20161021.dbc AEM EMS-V2 SI 20161128.dbc AEM EMS-4 SI 20161128.dbc SI Units (C / kPa / kph / Lambda)	
0.0039025 Lambda/Dit 0.5 0.5 to 1.495 Lambda a.f 0.006265 kpt/bit 0 0.10 411.986 km/h speec 1 0 0.10 255 unit .35156 Deg/bit -17 -17 to 72.65 Deg angl	Scaling	Offset	Range	DBC Unit Type
0.062865 kph/bit 0 0 to 411.986 km/h speed 1 0 0 to 255 unit .35156 Deg/bit -17 -17 to 72.65 Deg angl	0.00390625 Lambda/bit	0.5	0.5 to 1.496 Lambda	afr:LA
1 0 0 to 255 unit .35156 Deg/bit -17 -17 to 72.65 Deg angl	0.00390625 Lambda/bit	0.5	0.5 to 1.496 Lambda	afr:LA
.35156 Deg/bit -17 -17 to 72.65 Deg angl	0.0062865 kph/bit	0	0 to 411.986 km/h	speed:km/h
	1	0	0 to 255	unitless:
	.35156 Deg/bit	-17	-17 to 72.65 Deg	angle:deg
U.UUU2455 V/bit U U to 16.089 Volts volt	0.0002455 V/bit	0	0 to 16.089 Volts	voltage:V

	Contained in CA	AN DBC Files*:	AEM Infinity US 20161025.dbc AEM EMS-V2 US 20161128.dbc AEM EMS-4 US 20161128.dbc		
			US Units (F / PSI / MPH / AFR)		
	Scaling	Offset	Range	DBC Unit Type	
1	0.057227 AFR/bit	7.325	7.325 to 21.916 AFR	afr:AFR Gasoline	
1	0.057227 AFR/bit	7.325	7.325 to 21.916 AFR	afr:AFR Gasoline	
	0.00390625 mph/bit	0	0 to 255.996 MPH	speed:mph	
1	<==	<==	<==	<==	
1	<==	<==	<==	<==	
	< ==	<==	<==	<==	

Message ID: 0x01F0A004

Sources: Infinity EMS (30-71XX) V96.1+ 20ms continuous (50hz)

Byte	Bit	Bitmask	Label	Data Type
0-1			MAP	16 bit unsigned
2			VE	8 bit unsigned
3			FuelPressure	8 bit unsigned
4			OilPressure	8 bit unsigned
5			LambdaTarget	8 bit unsigned
	0 (lsb)	0	FuelPump	Boolean
	1	2	Fan 1	Boolean
	2	4	Fan 2	Boolean
6	3	8	N2O Active	Boolean
	4	16	O2FB Active	Boolean
	5	32	EngineProtectOut	Boolean
	6	64	MILOutput	Boolean
	7 (msb)	128	Lean Protect	Boolean
	0 (lsb)	0	Oil Press Protect	Boolean
	1	2	2 Step Fuel	Boolean
	2	4	2 Step Spark	Boolean
7	3	8	Sync State	Boolean
•	4	16	A/C On	Boolean
	5	32	BoostCut	Boolean
	6	64	CoolantProtect	Boolean
	7 (msb)	128	DBZ Error	Boolean

Control of the	AN DBC Files*:	AEM INFINITY SI 20161021.dbc		
Contained in C	AN DBC Files*:	SI Units (C / kPa / kph / Lambda)		
Scaling	Offset	Range	DBC Unit Type	
0.1 kPa/bit	0	0 to 6,553.5 kPa	pressure:kPa	
1 %/bit	0	0 to 255 %	fraction:%	
0.040 bar/bit	0	0 to 10.2 Bar	pressure_gauge:bar(g)	
0.040 bar/bit	0	0 to 10.2 Bar	pressure_gauge:bar(g)	
0.00390625 Lambda/bit	0.5	0.5 to 1.496 Lambda	afr:LA	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	

Contained in	Contained in CAN DBC Files*:		61025.dbc	
Contained in	CAN DBC Files*:	US Units (F / PSI / MPH / AFR)		
Scaling	Offset	Range	DBC Unit Type	
0.014504 PSI/bit	-14.6960	-14.696 to 935.81 PSIg	pressure_gauge:psi	
<==	<==	<==	<==	
0.580151 PSIg/bit	0	0 to 147.939 PSIg	pressure gauge:psi	
0.580151 PSIg/bit	0	0 to 147.939 PSIg	pressure_gauge:psi	
0.057227 AFR/bit	7.325	7.325 to 21.916 AFR	afr:AFR Gasoline	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	

Message ID: 0x01F0A005

Sources: Infinity EMS (30-71XX) V96.1+ 20ms continuous (50hz)

20ms continuous (50hz)				
Byte	Bit	Bitmask	Label	Data Type
0-1			LaunchRampTime [ms]	16 bit unsigned
2-3			MassAirflow [gms/s]	16 bit unsigned
4-5			MassAirflow [gms/rev]	16 bit unsigned
6			Clutch Pressure	8 bit unsigned
	0 (Isb)	0	Brake Sw	Boolean
	1	2	Clutch Sw	Boolean
	2	4	Shift Sw	Boolean
7	3	8	Staged Sw	Boolean
,	4	16		Boolean
	5	32		Boolean
	6	64		Boolean
	7 (msb)	128		Boolean

		AEM INFINITY SI 20161021.dbc		
Contained in	CAN DBC Files*:	SI Units (C / kPa / kph / Lambda)		
Scaling	Offset	Range	DBC Unit Type	
10 mS/bit	0	0 to 655,350 mS	time:ms	
.05 [gms/s] / bit	0	0 to 3,276.75 gms/s	mass_flow:g/s	
.0005 [gms/rev] / bit	0	0 to 32.7675 gms/rev	unitless:	
0.344738 Bar/bit	0	0 to 87.91 Bar	pressure_gauge:bar(g)	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	

6		AEM Infinity US 20161025.dbc		
Contained in Ca	Contained in CAN DBC Files*:		SI / MPH / AFR)	
Scaling	Offset	Range	DBC Unit Type	
<==	<==	<==	<==	
.00661387 [lb/min]/bit	0	0 to 433.440 lb/min	mass_flow:lb/min	
.0000661387 [lb/rev]/bit	0	0 to 4.3344 lb/rev	unitless:	
5 PSIg/bit	0	0 to 1275 PSIg	pressure gauge:psi(g)	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	

Message ID: 0x01F0A006

Sources: Infinity EMS (30-71XX) V96.1+

		70	ins continuous (ESIIE)	
Byte	Bit	Bitmask	Label	Data Type
0			Inj1Pulse	8 bit unsigned
1			Inj1LambdaFB	8 bit unsigned
2			PrimaryInjDuty [%]	8 bit unsigned
3			Mode Sw	8 bit unsigned
4			Water Pressure	8 bit unsigned
5			Pan Pressure	8 bit unsigned
6-7			Est Torque	16 bit unsigned

Garage and the	CAN DBC Files*:	AEM INFINITY SI 20:	161021.dbc
Contained is	1 CAN DBC Files*:	SI Units (C / kPa	/ kph / Lambda)
Scaling	Offset	Range	DBC Unit Type
0.1 mS/bit	0	0 to 25.5 mS	time:ms
0.5 %/bit	-64.00	-64 to 63.5 %	fraction:%
0.392157 %/bit	0	0 to 100 %	fraction:%
1 /bit	0	0 - 255	unitless:
0.040 bar/bit	0	0 to 10.2 Bar	pressure_gauge:bar(g)
1 kPa/bit	0	0 to 255 kPa	pressure:kPa
0.1 Nm/bit	-3276.8	-3276.8 to 3276.7 Nm	torque:N.m

Contained in	CAN DBC Files*:	AEM Infinity US 201	61025.dbc	
Contained in	CAN DOC FILES":	US Units (F / PSI / MPH / AFR)		
Scaling	Offset	Range	DBC Unit Type	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
0.580151 PSIg/bit	0	0 to 147.939 PSIg	pressure gauge:psi(g)	
0.14504 PSI/bit	-14.696	-14.696 to 22.289 PSIg	pressure_gauge:psi(g)	
0.0737562 ft-lbs/bit	-2416.8432	+/- 2416.77 ft-lbs	torque:ft.lb	

Message ID: 0x01F0A007

Sources: Infinity EMS (30-71XX) V96.1+ 40ms continuous (25hz)

Contained in CAN DBC Files*:	AEM INFINITY SI 20161021.dbc
contained in CAN DOC THES .	SI Units (C / kPa / kph / Lambda)

Contained in CAN DBC Files*:	AEM Infinity US 20161025.dbc
contained in CAR DDC THES .	US Units (F / PSI / MPH / AFR)

Byte	Bit	Bitmask	Label	Data Type
0			InjectorProbability [%]	8 bit unsigned
1			SparkProbability [%]	8 bit unsigned
2			LambdaTrim_Knock	8 bit unsigned
3			Baro Press	8 bit unsigned
4			FlexContent	8 bit unsigned
5			Airbox Temp	8 bit unsigned
6			Oil Temp	8 bit unsigned
	0 (Isb)	0	LaunchTimerArmed	Boolean
	1	2	ECU Logging Active	Boolean
	2	4	ModeSelect_lgn	2 bit unsigned
7	3	8		2 bit unsigned
′	4	16	ModeSelect Lambda	2 bit unsigned
	5	32	modeselect_tallibua	2 bit unsigned
	6	64	ModeSelect_DBW	1 bit unsigned
	7 (msb)	128	VTEC	Boolean

Scaling	Offset	Range	DBC Unit Type
0.392157 %/bit	0	0 to 100 %	fraction:%
0.392157 %/bit	0	0 to 100 %	fraction:%
0.001 Lambda/bit	0	0 to 0.255 Lambda	afr:LA
0.25 kPa/bit	50	50 to 113.75 kPa	pressure:kPa
0.392157 %/bit	0	0 to 100 %	fraction:%
1 Deg C/bit	-50.00	-50 to 205 C	temperature:C
1 Deg C/bit	-50.00	-50 to 205 C	temperature:C
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
####00## = ####10## =	unitless:		
##10#### =	unitless:		
#O###### =	unitless:		
0 = false, 1 = true	0	0/1	unitless:

	Scaling	Offset	Range	DBC Unit Type
1 🗆	<==	<==	<==	<==
1 🗆	<==	<==	<==	<==
1 🗆	0.01465 AFR/bit	0	0 to 3.73575 AFR	afr:AFR Gasoline
1 🗆	0.073825 inHg/bit	14.76	14.76 to 33.5903 inHg	pressure:inHg
	<==	<==	<==	<==
1 🗆	1.8 Deg F/bit	-58	-58 to 401 F	temperature:F
	1.8 Deg F/bit	-58	-58 to 401 F	temperature:F
1 🗆	<==	<==	<==	<==
1 🗆	<==	<==	<==	<==
	<==	<==	<==	<==
	<==	<==	<==	<==
1 🗆	<==	<==	<==	<==
1 🗀	<i>(</i>	/	/	/

Message ID: 0x01F0A008 Sources: Infinity EMS (30-71XX) V96.1+

200ms continuous (5hz)					
Byte	Bit	Bitmask	Label	Data Type	
0			Trans Temp	8 bit unsigned	
1-2			SparkCut [RPM]	16 bit unsigned	
3-4			FuelCut [RPM]	16 bit unsigned	
5			2StepTargetFuel [RPM]	8 bit unsigned	
6			2StepTargetSpark [RPM]	8 bit unsigned	
	0 (Isb)	0	ErrorThrottle	Boolean	
	1	2	ErrorCoolantTemp	Boolean	
	2	4	ErrorFuelPressure	Boolean	
7	3	8	ErrorOilPressure	Boolean	
,	4	16	ErrorEBP	Boolean	
	5	32	ErrorMAP	Boolean	
	6	64	ErrorAirTemp	Boolean	
	7 (msb)	128	ErrorBaro	Boolean	

Contained in CAN DBC Files*:		AEM INFINITY SI 20	L61021.dbc
Contained in	CAN DBC Files*:		/ kph / Lambda)
Scaling	Offset	Range	DBC Unit Type
1 Deg C/bit	-50.00	-50 to 205 C	temperature:C
0.39063 rpm/bit	0	0 to 25,599.94 RPM	angular_speed:rpm
0.39063 rpm/bit	0	0 to 25,599.94 RPM	angular_speed:rpm
100 rpm/bit	0	0 to 25,500 RPM	angular_speed:rpm
100 rpm/bit	0	0 to 25,500 RPM	angular_speed:rpm
= false, 1 = true	0	0/1	unitless:
= false, 1 = true	0	0/1	unitless:
) = false, 1 = true	0	0/1	unitless:
= false, 1 = true	0	0/1	unitless:
= false, 1 = true	0	0/1	unitless:
= false, 1 = true	0	0/1	unitless:
) = false, 1 = true	0	0/1	unitless:
1 - false 1 - true	0	0/1	unitlace

Contained in	CAN DBC Files*:	AEM Infinity US 201	.61025.dbc
Contained ii	CAN DBC Files .		PSI / MPH / AFR)
Scaling	Offset	Range	DBC Unit Type
1.8 Deg F/bit	-58	-58 to 401 F	temperature:F
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==

Message ID: 0x01F0A009

Sources: Infinity EMS (30-71XX) V96.1+

	40ms continuous (25hz)					
Į	Byte	Bit	Bitmask	Label	Data Type	
	0-1			Brake Pressure	16 bit unsigned	
	2-3			Steering Angle	16 bit unsigned	
	4-5			Launch Boost Target	16 bit unsigned	
ſ	6					
[7			****	****	

Contained in C	Contained in CAN DBC Files*:		161021.dbc
Contained in C			a / kph / Lambda)
Scaling	Offset	Range	DBC Unit Type
0.006895 Bar/bit	0	0 to 451.85 Bar	pressure_gauge:bar(g)
0.1 degree/bit	-3276.8	-3276.8 to 3276.7 deg	angle:deg
0.1 kPa/bit	0	0 to 6,553.5 kPa	pressure:kPa

Contained in	Contained in CAN DBC Files*:		61025.dbc
Contained in	CAN DOC FILES .	US Units (F/F	PSI / MPH / AFR)
Scaling	Scaling Offset		DBC Unit Type
0.1 PSIg/bit	0	0 to 6553.5 PSIg	pressure_gauge:psi(g)
<==	<==	<==	<==
0.014504 PSI/bit	-14.6960	-14.696 to 935.81 PSIg	pressure_gauge:psi(g)
<==	<==	<==	<==
<==	<==	<==	<==

Message ID: 0x01F0A00A

Sources: Infinity EMS (30-71XX) V96.1+ w/VVTi

40ms continuous (25nz)					
Byte	Bit	Bitmask	Label	Data Type	
0			VVC1A_Cam_Timing	8 bit unsigned	
1			VVC2A_Cam_Timing	8 bit unsigned	
2			VVC1B_Cam_Timing	8 bit unsigned	
3			VVC2B_Cam_Timing	8 bit unsigned	
4			VVC1 Target [deg]	8 bit unsigned	
5			VVC2 Target [deg]	8 bit unsigned	
6					
7					

Control of	in CAN DRC Files*:	AEM INFINITY SI 20	L61021.dbc
Contained	Contained in CAN DBC Files -:		/ kph / Lambda)
Scaling	Offset	Range	DBC Unit Type
0.5 deg/bit	-50	-50 to 77.5 deg	angle:deg
0.5 deg/bit	-50	-50 to 77.5 deg	angle:deg
0.5 deg/bit	-50	-50 to 77.5 deg	angle:deg
0.5 deg/bit	-50	-50 to 77.5 deg	angle:deg
0.5 deg/bit	-50	-50 to 77.5 deg	angle:deg
0.5 deg/bit	-50	-50 to 77.5 deg	angle:deg

Contained	in CAN DRC Ellect.	AEM Infinity US 20	161025.dbc	
Contained in CAN DBC Files*:		US Units (F / PSI / MPH / AFR)		
Scaling	Scaling Offset		DBC Unit Type	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	

Message ID: 0x01F0A00B

Sources: Infinity EMS (30-71XX) V96.1+ w/Boost 40ms continuous (25hz)

Byte	Bit	Bitmask	Label	Data Type
0-1			BoostTarget	16 bit unsigned
2-3			ChargeOutPress	16 bit unsigned
4			BoostControl [%]	8 bit unsigned
5			BoostFB_PID [%]	8 bit unsigned
6			ChargeOutTemp	8 bit unsigned
7			TurboSpeed [RPM]	8 bit unsigned

Contained in CAN DBC Files*:		AEM INFINITY SI 20161021.dbc SI Units (C / kPa / kph / Lambda)	
0.1 kPa/bit	0	0 to 6,553.5 kPa	pressure:kPa
0.1 kPa/bit	0	0 to 6,553.5 kPa	pressure:kPa
0.392157 %/bit	0	0 to 100 %	fraction:%
0.392157 %/bit	0	0 to 100 %	fraction:%
1 Deg C/bit	-50.00	-50 to 205 C	temperature:C
500 rpm/bit	0	0 to 127,500 RPM	angular speed:rpm

Contained in	Contained in CAN DBC Files*:		AEM Infinity US 20161025.dbc	
Contained in			SI / MPH / AFR)	
Scaling	Offset	Range	DBC Unit Type	
0.014504 PSI/bit	-14.6960	-14.696 to 935.81 PSIg	pressure_gauge:psi(g)	
0.014504 PSI/bit	-14.6960	-14.696 to 935.81 PSIg	pressure_gauge:psi(g)	
<==	<==	<==	<==	
<==	<==	<==	<==	
1.8 Deg F/bit	-58	-58 to 401 F		
<==	<==	<==	<==	

Message ID: 0x01F0A00D

Sources: Infinity EMS (30-71XX) V96.1+ w/DBW

yte	Bit	Bitmask	Label	Data Type
0			DBW_APP1	8 bit unsigned
1			DBW_Target	8 bit unsigned
2			DBW1_TPSA	8 bit unsigned
3			DBW2_TPSA	8 bit unsigned
4				
	0 (lsb)	0	DBW_Error_APP_Corr	Boolean
	1	2	DBW_Error_APP1_Range	Boolean
	2	4	DBW_Error_APP2_Range	Boolean
5	3	8	DBW_Error_BTO	Boolean
-	4	16		Boolean
	5	32		Boolean
	6	64		Boolean
	7 (msb)	128		Boolean
	0 (Isb)	0	DBW1 Error Fatal	Boolean
	1	2	DBW1_Error_TPSA_Range	Boolean
	2	4	DBW1 Error TPSB Range	Boolean
6	3	8	DBW1_Error_Tracking	Boolean
	4	16	DBW1 Error Current	Boolean
	5	32	DBW1_Error_TPS_Corr	Boolean
	6	64		Boolean
	7 (msb)	128		Boolean
	0 (lsb)	0	DBW2 Error Fatal	Boolean
	1	2	DBW2_Error_TPSA_Range	Boolean
	2	4	DBW2_Error_TPSB_Range	Boolean
7	3	8	DBW2_Error_Tracking	Boolean
	4	16	DBW2_Error_Current	Boolean
	5	32	DBW2_Error_TPS_Corr	Boolean
	6	64		Boolean
	7 (msb)	128		Boolean

Contained in CAN DBC Files*:		AEM INFINITY SI 20161021.dbc		
Contained in			a / kph / Lambda)	
Scaling	Offset	Range	DBC Unit Type	
0.392157 %/bit	0	0 to 100 %	fraction:%	
0.392157 %/bit	0	0 to 100 %	fraction:%	
0.392157 %/bit	0	0 to 100 %	fraction:%	
0.392157 %/bit	0	0 to 100 %	fraction:%	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	

	Contained in CAN DBC Files*:		161025.dbc
Contained in CAN DBC Hies*:		US Units (F / PSI / MPH / AFR)	
Scaling	Offset	Range	DBC Unit Type
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==

Message ID: 0x01F0A010

Sources: Infinity EMS (30-71XX) V96.1+ w/TC

S: Infinity EMS (30-71XX) 1
20ms continuous (50hz)

Label

TC. FueCut [Ks]

TC. Sparkcut [Ks]

TC. Retard (degBTDC)

TC. RedeuceDBW [Ks]

TC. Mode Sw

38tepTargetFuer (RPM)

38tepTargetFuer (RPM)

3 8tep Fuel

Contained in	CAN DBC Files*:	AEM INFINITY SI 20	161021.dbc
Contained in	CAN DBC Files .	SI Units (C / kPa / kph / Lambda)	
Scaling	Offset	Range	DBC Unit Type
0.392157 %/bit	0	0 to 100 %	fraction:%
0.392157 %/bit	0	0 to 100 %	fraction:%
0.25 deg/bit	0	0 to 63.75 deg	angle:deg
0.392157 %/bit	0	0 to 100 %	fraction:%
1 /bit	0	0 - 255	unitless:
100 rpm/bit	0	0 to 25,500 RPM	angular_speed:rpm
100 rpm/bit	0	0 to 25,500 RPM	angular_speed:rpm
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 - fake 1 - true	n	0/1	unitlacci

Contribute of	in CAN DBC Files*:	AEM Infinity US 20161025.dbc US Units (F / PSI / MPH / AFR)	
Contained	In CAN DBC HIES*:		
Scaling	Offset	Range	DBC Unit Type
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==

Message ID: 0x01F0A011 Sources: Infinity EMS (30-71XX) V96.1+ w/TC 20ms continuous (50hz)

Contained in CAN DBC Files*:	AEM INFINITY SI 20161021.dbc	
contained in CAN DDE FIES .	SI Units (C / kPa / kph / Lambda)	

Contained in CAN DBC Files*:	AEM Infinity US 20161025.dbc
contained in CAN DOCTILES .	US Units (F / PSI / MPH / AFR)

Byte	Bit	Bitmask	Label	Data Type
0-1			DLWheelSpeed	16 bit unsigned
2-3			DRWheelSpeed	16 bit unsigned
4-5			NLWheelSpeed	16 bit unsigned
6.7			NPWheelSneed	16 hit unsigned

Scaling	Offset	Range	DBC Unit Type
0.02 kph/bit	0	0 to 1310.7 km/h	speed:km/h
0.02 kph/bit	0	0 to 1310.7 km/h	speed:km/h
0.02 kph/bit	0	0 to 1310.7 km/h	speed:km/h
0.02 kph/bit	0	0 to 1310.7 km/h	speed:km/h

1	Scaling	Offset	Range	DBC Unit Type
	0.0124274 mph/bit	0	0 to 814.431 MPH	speed:mph
	0.0124274 mph/bit	0	0 to 814.431 MPH	speed:mph
	0.0124274 mph/bit	0	0 to 814.431 MPH	speed:mph
	0.0124274 mph/bit	0	0 to 814.431 MPH	speed:mph

Message ID: 0x01F0A012

Sources: Infinity EMS (30-71XX) V96.1+ w/TC

20ms continuous (50hz)				
Byte	Bit	Bitmask	Label	Data Type
0-1			TC_SlipTarget	16 bit unsigned
2-3			TC_SlipMeasured	16 bit unsigned
4-5			TC_TqReduceReq	16 bit unsigned
6			TC_SlipTargetTrim	8 bit unsigned
7				

Contained in C	*** DDC 511*-	AEM INFINITY SI 20161021.dbc		
Contained in C	AN DBC Files*:	SI Units (C / kPa	a / kph / Lambda)	
Scaling	Offset	Range	DBC Unit Type	
0.02 kph/bit	0	0 to 1310.7 km/h	speed:km/h	
0.02 kph/bit	0	0 to 1310.7 km/h	speed:km/h	
0.25/bit	0	0 to 16,383.75	unitless:	
1.609 kph/bit	-80.45	-80.45 to 329.845	speed:km/h	

Contract of the	CAN DBC Files*:	AEM Infinity US 2016	51025.dbc	
Contained in	LAN DBC Files*:	US Units (F / PSI / MPH / AFR)		
Scaling	Offset	Range	DBC Unit Type	
0.0124274 mph/bit	0	0 to 814.431 MPH	speed:mph	
0.0124274 mph/bit	0	0 to 814.431 MPH	speed:mph	
<==	<==	<==	<==	
1 mph/bit	-50	-50 to 205 MPH	speed:mph	

Message ID: 0x01F0A020

Sources: Infinity EMS (30-71XX) V96.1+ w/Knock

20ms continuous (50hz)					
Byte	Bit	Bitmask	Label	Data Type	
0			KnockFB_Cyl1	8 bit unsigned	
1			KnockFB Cyl2	8 bit unsigned	
2			KnockFB_Cyl3	8 bit unsigned	
3			KnockFB_Cyl4	8 bit unsigned	
4			KnockFB_Cyl5	8 bit unsigned	
5			KnockFB_Cyl6	8 bit unsigned	
6			KnockFB_Cyl7	8 bit unsigned	
7			VencliFB Cul9	Pagarian of	

Contained is	CAN DBC Files*:	AEM INFINITY SI 20161021.dbc		
Contained ii	CAN DBC Files .	SI Units (C / kPa	/ kph / Lambda)	
Scaling	Offset	Range	DBC Unit Type	
- 0.1 degree/bit	0	0 to -25.5 deg	angle:deg	
- 0.1 degree/bit	0	0 to -25.5 deg	angle:deg	
- 0.1 degree/bit	0	0 to -25.5 deg	angle:deg	
- 0.1 degree/bit	0	0 to -25.5 deg	angle:deg	
- 0.1 degree/bit	0	0 to -25.5 deg	angle:deg	
- 0.1 degree/bit	0	0 to -25.5 deg	angle:deg	
- 0.1 degree/bit	0	0 to -25.5 deg	angle:deg	
- 0.1 degree/bit	0	0 to -25.5 deg	angle:deg	

	Contained in	CAN DBC Files*:	AEM Infinity US 201	.61025.dbc
1	Contained in	CAN DBC Files .	US Units (F / PSI / MPH / AFR)	
1	Scaling	Offset	Range	DBC Unit Type
1	<==	<==	<==	<==
1	<==	<==	<==	<==
1	<==	<==	<==	<==
1	<==	<==	<==	<==
1	<==	<==	<==	<==
1	<==	<==	<==	<==
1	<==	<==	<==	<==
1	<==	<==	<==	<==

Message ID: 0x01F0A021 Sources: Infinity EMS (30-71XX) V96.1+ w/Knock

			20ms continuous (50hz)	
Byte	Bit	Bitmask	Label	Data Type
0			KnockFB Cyl9	8 bit unsigned
1			KnockFB_Cyl10	8 bit unsigned
2				
3				
4				
5				
6				
7				

Contained in 6	AN DRC Files*:	AEM INFINITY SI 20	NITY SI 20161021.dbc	
Contained in C	AN DBC FIIES .	SI Units (C / kPa / kph / Lambda)		
Scaling	Offset	Range	DBC Unit Type	
- 0.1 degree/bit	0	0 to -25.5 deg	angle:deg	
- 0.1 degree/bit	0	0 to -25.5 deg	angle:deg	

Contain	ed in CAN DBC Files*:	AEM Infinity US 20	161025.dbc
Contain	ed III CAN DBC Files .	US Units (F /	PSI / MPH / AFR)
Scaling	Offset	Range	DBC Unit Type
<==	<==	<==	<==
<==	<==	<==	<==

Message ID: 0x0000001F

Sources: AEM 4 Ch UEGO (30-2340) MODE 1 30-2340N same w/11 bit & 1mBit/sec

	101113 COTTETT COTTE				
Byte	Bit	Bitmask	Label	Data Type	
0-1			Lambda 1	16 bit unsigned	
2-3			Lambda 2	16 bit unsigned	
4-5			Lambda 3	16 bit unsigned	
6-7			Lambda 4	16 bit unsigned	

Contained in	CAN DBC Files*:	AEM 30-2340 4Ch UEGO SI 20161213.dbc AEM 30-2340N 4Ch UEGO SI 20161213.dbc SI Units (C / kPa / kph / Lambda)		
Scaling	Offset	Range	DBC Unit Type	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA	

Contained in	CAN DBC Files*:	AEM 30-2340 4Ch UEGO US 20161213.d AEM 30-2340N 4Ch UEGO US 20161213.d US Units (F / PSI / MPH / AFR)	
Scaling	Offset	Range	DBC Unit Type
.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline
.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline
.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline
.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline

Message ID: 0x00000020

Sources: AEM 4 Ch UEGO (30-2340) MODE 2 30-2340N same w/11 bit & 1mBit/sec

10	Oms continuous (100hz)	

Byte	Bit	Bitmask	Label	Data Type
0-1			Lambda 5	16 bit unsigned
2-3			Lambda 6	16 bit unsigned
4-5			Lambda 7	16 bit unsigned
6-7			Lambda 8	16 bit unsigned

Contained in	CAN DBC Files*:	AEM 30-2340 4Ch UE AEM 30-2340N 4Ch U	
		SI Units (C / kPa	a / kph / Lambda)
Scaling	Offset	Range	DBC Unit Type
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA
0001 Lambda/hit	0	0 to 6 5525 Lambda	afr:LA

	Contained in C	'AN DBC Files*:	AEM 30-2340 4Ch UEGO US 20161213.dbc AEM 30-2340N 4Ch UEGO US 20161213.dbc US Units (F/PSI/MPH/AFR)		
	Scaling	Scaling Offset		DBC Unit Type	
	.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	
1	.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	
1	.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	
1	.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	

Message ID: 0x00000021

Sources: AEM 4 Ch UEGO (30-2340) MODE 3 30-2340N same w/11 bit & 1mBit/sec 10ms continuous (100hz)

Byte	Bit	Bitmask	Label	Data Type
0-1			Lambda 1	16 bit unsigned
2-3			Lambda 3	16 bit unsigned
4-5			Lambda 5	16 bit unsigned
6-7			Lambda 7	16 bit unsigned

Contained in C		AEM 30-2340 4Ch UE AEM 30-2340N 4Ch U SI Units (C / kPa	
Scaling	Offset	Range	DBC Unit Type
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA

Contained in CA	AN DBC Files*:	AEM 30-2340 4Ch UEGO US 20161213.dbc AEM 30-2340N 4Ch UEGO US 20161213.dbc US Units (F/PSI/MPH/AFR)		
Scaling	Scaling Offset		DBC Unit Type	
.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	
.001465 AFR/bit	.001465 AFR/bit 0		afr:AFR Gasoline	
.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	
.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	

Message ID: 0x00000022

Sources: AEM 4 Ch UEGO (30-2340) MODE 4 30-2340N same w/11 bit & 1mBit/sec

	Byte	Bit	Bitmask	Label	Data Type
	0-1			Lambda 2	16 bit unsigned
Г	2-3			Lambda 4	16 bit unsigned
Г	4-5			Lambda 6	16 bit unsigned
	6-7			Lambda 8	16 bit unsigned

Contained in (CAN DBC Files*:	AEM 30-2340 4Ch UEGO SI 20161213.dbc AEM 30-2340N 4Ch UEGO SI 20161213.dbc SI Units (C / kPa / kph / Lambda)		
Scaling	Offset	Range	DBC Unit Type	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA	

:	Contained in CA	.N DBC Files*:	AEM 30-2340 4Ch UEGO US 20161213.dbc AEM 30-2340N 4Ch UEGO US 20161213.dbc US Units (F/PSI/MPH/AFR)		
	Scaling	Offset	Range	DBC Unit Type	
	.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	
	.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	
	.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	
	.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	

Message ID: 0x00000023

Sources: AEM 4 Ch UEGO (30-2340) MODE 5 30-2340N same w/11 bit & 1mBit/sec 10ms continuous (100hz)

	Tonis Continuous (Toonz)								
	Byte	Bit	Bitmask	Label	Data Type				
	0-1			Lambda 9	16 bit unsigned				
	2-3			Lambda 10	16 bit unsigned				
	4-5			Lambda 11	16 bit unsigned				
Г	6-7			Lambda 12	16 bit unsigned				

Contained in C	CAN DBC Files*:	AEM 30-2340 4Ch UE	
		SI Units (C / kPa	a / kph / Lambda)
Scaling	Offset	Range	DBC Unit Type
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA

	Contained in C	AN DBC Files*:	AEM 30-2340 4Ch UEGO US 20161213.dbc AEM 30-2340N 4Ch UEGO US 20161213.dbc US Units (F/PSI/MPH/AFR)		
1	Scaling	Offset	Range	DBC Unit Type	
	.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	
	.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	
	.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	
	.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	

Message ID: 0x00000024

Sources: AEM 4 Ch UEGO (30-2340) MODE 6 30-2340N same w/11 bit & 1mBit/sec

- 1	ilis continuous (100112)
nask	Label

Byte	Bit	Bitmask	Label	Data Type
0-1			Lambda 1	16 bit unsigned
2-3			Lambda 2	16 bit unsigned

Contained in C		AEM 30-2340 4Ch UEGO SI 20161213.dbc AEM 30-2340N 4Ch UEGO SI 20161213.dbc SI Units (C / kPa / kph / Lambda)		
Scaling	Offset	Range	DBC Unit Type	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA	

	Contained in C	AN DBC Files*:	AEM 30-2340 4Ch UEGO US 20161213.dbc AEM 30-2340N 4Ch UEGO US 20161213.dbc		
		Scaling Offset		US Units (F / PSI / MPH / AFR)	
	Scaling			DBC Unit Type	
	.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	
٦	.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	

4-5		Lambda 3	16 bit unsigned
6		-	
-			

.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA
		-	_

.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline

Message ID: 0x00000025

Sources: AEM 4 Ch UEGO (30-2340) MODE 7 30-2340N same w/11 bit & 1mBit/sec 10ms continuous (100hz)

		10	Jms continuous (100hz)	
Byte	Bit	Bitmask	Label	Data Type
0-1			Lambda 4	16 bit unsigned
2-3			Lambda 5	16 bit unsigned
4-5			Lambda 6	16 bit unsigned
6				
7				

Contained in C	AN DBC Files*:	AEM 30-2340 4Ch UE AEM 30-2340N 4Ch U		
		SI Units (C / kPa / kph / Lambda)		
Scaling	Offset	Range	DBC Unit Type	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA	

Contained in	CAN DBC Files*:	AEM 30-2340 4Ch UEGO US 20161213.dbc AEM 30-2340N 4Ch UEGO US 20161213.dbc US Units (F/PSI/MPH/AFR)		
Scaling	Offset	Range	DBC Unit Type	
.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	
.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	
.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	

Message ID: 0x00000026

Sources: AEM Wideband Failsafe (30-4900) 10ms continuous (100hz)						
0-1	0-1		Lambda	16 bit unsigned		
2-3			Pressure	16 bit unsigned		
4-5			RPM	16 bit unsigned		
	0 (Isb)	0	AFR Ready	Boolean		
	1	2	AFR Heater Open Error	Boolean		
	2	4	AFR CJ125 Error	Boolean		
6	3	8	AFR Sensor Heating Up	Boolean		
	4	16	AFR Low Voltage	Boolean		
	5	32	AFR Heater Time-Out Error	Boolean		
	6	64	AFR Heater Short Error	Boolean		
	7 (msb)	128	AFR Overtemp Error	Boolean		
	0 (Isb)	0	Alarm Status	Boolean		
	1	2	Alarm Source	Boolean		
	2	4	Alarm Source	Boolean		
7	3	8	Alarm Source	Boolean		
	4	16		Boolean		
	5	32		Boolean		
	6	64		Boolean		
	7 (msb)	128		Boolean		

		ТВ	D	
Contained in	CAN DBC Files*:	SI Units (C / kPa / kph / Lambda)		
Scaling	Offset	Range	DBC Unit Type	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA	
0.00689476 kPa/bit	-2.09636	-2.09636 to 449.752 kPa	pressure:kPa	
.39063 RPM/bit	0	0 to 25,600 RPM	angular_speed:rpm	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	

	-			

Control of the	Contained in CAN DBC Files*:		TBD		
Contained in			US Units (F / PSI / MPH / AFR)		
Scaling	Offset	Range	DBC Unit Type		
.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline		
.001 PSI/bit	-15	-15 to 50.535 PSIg	pressure_gauge:psi(g		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		

Message ID: 0x00000027

Sources: AEM Wideband Failsafe (30-4900)

10ms continuous (100hz)					
Byte	Bit	Bitmask	Label	Data Type	
0-1			Lambda Upper Limit	16 bit unsigned	
2-3			Lambda Lower Limit	16 bit unsigned	
4-5			Alarm Delay Limit	16 bit unsigned	
6-7			Alarm Delay Counter	16 bit unsigned	

Contained in C	AN DRC Ellect.	TBD SI Units (C / kPa / kph / Lambda)		
Contained in C	AN DBC Files .			
Scaling	Offset	Range	DBC Unit Type	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA	
1 mS/bit	0	0 to 65,535 mS	time:ms	
1 mS/bit	0	0 to 65,535 mS	time:ms	

Contained in CAN DBC Files*:		-	BD PSI / MPH / AFR)
Scaling	Offset	Range	DBC Unit Type
.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline
.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline
<==	<==	<==	<==
<==	<==	<==	<==

Message ID: 0x00000028

Sources: AEM Wideband Failsafe (30-4900) 10ms (100hz) only in alarm mode

Byte	Bit	Bitmask	Label	Data Type
0-1			Alarm Lambda	16 bit unsigned
2-3			Alarm Pressure	16 bit unsigned
4-5			Alarm Reset Limit	16 bit unsigned
6-7			Alarm Reset Counter	16 bit unsigned

Contained in (Contained in CAN DBC Files*:		BD ı / kph / Lambda)
Scaling	Scaling Offset		DBC Unit Type
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA
0.00689476 kPa/bit	-2.09636	-2.09636 to 449.752 kPa	pressure:kPa
1 mS/bit	0	0 to 65,535 mS	time:ms
1 mS/bit	0	0 to 65,535 mS	time:ms

Contained in CAN DBC Files*:		TBD US Units (F / PSI / MPH / AFR)	
Scaling	Offset	Range	DBC Unit Type
.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline
.001 PSI/bit	-15	-15 to 50.535 PSIg	pressure_gauge:psi(g)
<==	<==	<==	<==
<==	<==	<==	<==

Message ID: 0x000001AF

Sources: AEM 4 Ch UEGO (30-2340) MODE 1 30-2340N same w/11 bit & 1mBit/sec

			10ms continuous (25hz)	
Byte	Bit	Bitmask	Label	Data Type
	0 (Isb)	0	AFR 1 Ready	Boolean
	1	2	AFR 1 Heater Open Error	Boolean
	2	4	AFR 1 VM Error	Boolean
0	3	8	AFR 1 UN Error	Boolean
	4	16	AFR 1 IP Error	Boolean
	5	32	AFR 1 Heater Time-Out Error	Boolean
	6	64	AFR 1 Heater Short Error	Boolean
	7 (msb)	128	AFR 1 Overtemp Error	Boolean
	0 (Isb)	0	AFR 2 Ready	Boolean
	1	2	AFR 2 Heater Open Error	Boolean
	2	4	AFR 2 VM Error	Boolean
1	3	8	AFR 2 UN Error	Boolean
-	4	16	AFR 2 IP Error	Boolean
	5	32	AFR 2 Heater Time-Out Error	Boolean
	6	64	AFR 2 Heater Short Error	Boolean
	7 (msb)	128	AFR 2 Overtemp Error	Boolean
	0 (Isb)	0	AFR 3 Ready	Boolean
	1	2	AFR 3 Heater Open Error	Boolean
	2	4	AFR 3 VM Error	Boolean
2	3	8	AFR 3 UN Error	Boolean
2	4	16	AFR 3 IP Error	Boolean
	5	32	AFR 3 Heater Time-Out Error	Boolean
	6	64	AFR 3 Heater Short Error	Boolean
	7 (msb)	128	AFR 3 Overtemp Error	Boolean
	0 (Isb)	0	AFR 4 Ready	Boolean
	1	2	AFR 4 Heater Open Error	Boolean
	2	4	AFR 4 VM Error	Boolean
	3	8	AFR 4 UN Error	Boolean
3	4	16	AFR 4 IP Error	Boolean
	5	32	AFR 4 Heater Time-Out Error	Boolean
	6	64	AFR 4 Heater Short Error	Boolean
	7 (msb)	128	AFR 4 Overtemp Error	Boolean
	0 (Isb)	0	UEGO Low Voltage Error	Boolean
	1	2	EBP sensor ready	Boolean
	2	4	EBP sensor Error Low Volt	Boolean
	3	8	EBP sensor detected	Boolean
4	4	16	CAN Config Mode	Boolean
	5	32	CAN Config Mode	Boolean
		64	CAN Config Mode	
	6		CAN Config Mode	Boolean
	7 (msb)	128		Boolean
	0 (Isb)	0	Reserved	Boolean
	1	2	Reserved	Boolean
	2	4	Reserved	Boolean
5	3	8	Reserved	Boolean
	4	16	Sensor 4 Heating up	Boolean
	5	32	Sensor 3 Heating up	Boolean
	6	64	Sensor 2 Heating up	Boolean
	7 (msb)	128	Sensor 1 Heating up	Boolean
	1 1		Colorest Processes 4	AC his contact

		AEM 30-2340 4Ch U	
		SI Units (C / kPa / kph / Lambda)	
Scaling	Offset	Range	DBC Unit Type
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true 0 = false, 1 = true	0	0/1	unitless: unitless:
0 = false, 1 = true 0 = false, 1 = true	0	0/1	
0 = false, 1 = true 0 = false, 1 = true	0	0/1	unitless: unitless:
	0	0/1	
0 = false, 1 = true	0	0/1	unitless: unitless:
0 = false, 1 = true			
0 = false, 1 = true	0	0/1	unitless:

				EGO US 20161213.dbc	
	Contained in C	AN DBC Files*:		IEGO US 20161213.dbc	
			US Units (F / PSI / MPH / AFR)		
	Scaling	Offset	Range	DBC Unit Type	
1	<==	<==	<==	<==	
1	<==	<==	<==	<==	
_	<==	<==	<==	<==	
_	<==	<==	<==	<==	
4	<==	<==	<==	<==	
4	<==	<==	<==	<==	
4	<==	<==	<==	<==	
4	<==	<==	<==	<==	
4	<==	<==	<==	<==	
4	<==	<==	<==	<==	
4	<==	<==	<==	<==	
4	<==	<==	<==	<==	
4	<==	<==	<==	<==	
4	<==	<==	<==	<==	
4	<==	<==	<==	<==	
+	<==	<==	<==	<==	
4	<==	<==	<==	<==	
4	<==	<==	<==	<==	
4	<==	<==	<==	<==	
+	<== <==	<==	<== <==	<==	
+	<== <==	<==	<== <==	<== <==	
+	<== <==	<==	<==	<==	
+	<== <==	<==	<== <==	<==	
+	<== <==	<==	<== <==	<==	
+	<== <==	<==	<== <==	<==	
1	<==	<==	<==	<==	
+	<==	<==	<==	<==	
1	C==	<==	C==	<==	
1	<==	<==	<==	<==	
1	<==	<==	<==	<==	
1	<==	<==	<==	<==	
1	<==	<==	<==	<==	
1	<==	<==	<==	<==	
1	<==	<==	<==	<==	
1	<==	<==	<==	<==	
1	<==	<==	<==	<==	
1	<==	<==	<==	<==	
1	<==	<==	<==	<==	
1	C==	<==	C==	<==	
1	<==	<==	<==	<==	
1	<==	<==	<==	<==	
1	<==	<==	<==	<==	
1	<==	<==	<==	<==	
1	<==	<==	<==	<==	
1	<==	<==	<==	<==	
1	<==	<==	<==	<==	
1	<==	<==	<==	<==	
1	.01 psig/bit	0	0 to 655.35 psig	pressure_gauge:psi(g)	

Message ID: 0x000001B0 Sources: AEM 4 Ch UEGO (30-2340) MODE 2 30-2340N same w/11 bit & 1mBit/sec

40ms continuous (25hz)						
Byte	te Bit Bitmask Label Data Type					
	0 (Isb)	0	AFR 5 Ready	Boolean		

Contained in (AEM 30-2340N 4Ch	VEGO SI 20161213.dbc UEGO SI 20161213.dbc (Pa / kph / Lambda)
Scaling	Offset	Range	DBC Unit Type
0 = false, 1 = true	0	0/1	unitless:

			EGO US 20161213.dbc		
Contained in CA	N DBC Files*:	AEM 30-2340N 4Ch UEGO US 20161213.dbc			
		US Units (F/F	PSI / MPH / AFR)		
Scaling	Offset	Range	DBC Unit Type		
<==	<==	<==	<==		

	1	2	AFR 5 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	2	4	AFR 5 VM Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
0	3	8	AFR 5 UN Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	4	16	AFR 5 IP Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	5	32	AFR 5 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	6	64	AFR 5 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	7 (msb)	128	AFR 5 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	0 (Isb)	0	AFR 6 Ready	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	1	2	AFR 6 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	2	4	AFR 6 VM Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
1	3	8	AFR 6 UN Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
-	4	16	AFR 6 IP Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	5	32	AFR 6 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	6	64	AFR 6 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	7 (msb)	128	AFR 6 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	0 (Isb)	0	AFR 7 Ready	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	1	2	AFR 7 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	2	4	AFR 7 VM Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
2	3	8	AFR 7 UN Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	4	16	AFR 7 IP Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	5	32	AFR 7 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	6	64	AFR 7 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	7 (msb)	128	AFR 7 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	0 (Isb)	0	AFR 8 Ready	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	1	2	AFR 8 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	2	4	AFR 8 VM Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
3	3	8	AFR 8 UN Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
3	4	16	AFR 8 IP Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	5	32	AFR 8 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	6	64	AFR 8 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	7 (msb)	128	AFR 8 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	0 (Isb)	0	UEGO Low Voltage Error	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	1	2	EBP sensor ready	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	2	4	EBP sensor Error Low Volt	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
4	3	8	EBP sensor detected	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
1 *	4	16	CAN Config Mode	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
1	5	32	CAN Config Mode	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	6	64	CAN Config Mode	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
1	7 (msb)	128	CAN Config Mode	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	0 (Isb)	0	Reserved	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
1	1	2	Reserved	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	2	4	Reserved	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
5	3	8	Reserved	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
1	4	16	Sensor 8 Heating up	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	5	32	Sensor 7 Heating up	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	6	64	Sensor 6 Heating up	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	7 (msb)	128	Sensor 5 Heating up	Boolean	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
6-7			Exhaust Pressure 2	16 bit unsigned	0.0689476 kPag/bit	0	0 to 4,518.48 kPag	pressure_gauge:kPa(g)	.01 psig/bit	0	0 to 655.35 psig	pressure_gauge:psi(g)

Message ID: 0x000001B1 Sources: AEM 4 Ch UEGO (30-2340) MODE 3 30-2340N same w/11 bit & 1mBit/sec

yte	Bit	Bitmask	Label	Data Type
	0 (Isb)	0	AFR 1 Ready	Boolean
0	1	2	AFR 1 Heater Open Error	Boolean
	2	4	AFR 1 VM Error	Boolean
	3	8	AFR 1 UN Error	Boolean
	4	16	AFR 1 IP Error	Boolean
	5	32	AFR 1 Heater Time-Out Error	Boolean
	6	64	AFR 1 Heater Short Error	Boolean
	7 (msb)	128	AFR 1 Overtemp Error	Boolean
	0 (Isb)	0	AFR 3 Ready	Boolean
	1	2	AFR 3 Heater Open Error	Boolean
	2	4	AFR 3 VM Error	Boolean
	3	8	AFR 3 UN Error	Roolean
1	4	16	AFR 3 IP Error	Boolean
	5	32	AFR 3 Heater Time-Out Error	Boolean
	6	64	AFR 3 Heater Short Error	Boolean
	7 (msb)	128	AFR 3 Overtemp Error	Boolean
	0 (Isb)	0	AFR 5 Ready	Boolean
	1	2	AFR 5 Heater Open Error	Boolean
	2	4	AFR 5 VM Error	Boolean
	3	8	AFR 5 UN Error	Boolean
2	4	16	AFR 5 IP Error	Boolean
	5	32	AFR 5 Heater Time-Out Error	Boolean
	6	64	AFR 5 Heater Short Error	Boolean
	7 (msb)	128	AFR 5 Overtemp Error	Boolean
	0 (Isb)	0	AFR 7 Ready	Boolean
	1	2	AFR 7 Heater Open Error	Boolean
	2	4	AFR 7 VM Error	Boolean
	3	8	AFR 7 UN Error	Boolean
3	4	16	AFR 7 IP Error	Boolean
	5	32		Boolean
			AFR 7 Heater Time-Out Error	
	6 7 (msb)	64 128	AFR 7 Heater Short Error	Boolean
			AFR 7 Overtemp Error	Boolean
	0 (Isb)	0	UEGO Low Voltage Error	Boolean
	1	2	EBP sensor ready	Boolean
	2	4	EBP sensor Error Low Volt EBP sensor detected	Boolean
4	3	8		Boolean
	4	16	CAN Config Mode	Boolean
	5	32	CAN Config Mode	Boolean
	- 6	64	CAN Config Mode	Boolean
	7 (msb)	128	CAN Config Mode	Boolean
	0 (Isb)	0	Reserved	Boolean
	1	2	Reserved	Boolean
	2	4	Reserved	Boolean
5	3	8	Reserved	Boolean
	4	16	Sensor 7 Heating up	Boolean
	5	32	Sensor 5 Heating up	Boolean
	- 6	64	Sensor 3 Heating up	Boolean
	7 (msb)	128	Sensor 1 Heating up	Boolean
-7			Exhaust Pressure 1	16 bit unsigned

Contained in (CAN DBC Files*:	AEM 30-2340N 4Ch U	GO SI 20161213.dbc EGO SI 20161213.db a / kph / Lambda)
Scaling	Offset	Range	DBC Unit Type
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	o o	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	o o	0/1	unitless:
0 = false, 1 = true	0	0/1	unitless:
0 = false, 1 = true	o o	0/1	unitless:
0.0689476 kPag/bit	0	0 to 4.518.48 kPag	pressure gauge:kPa(g)

Contained i	n CAN DBC Files*:	AEM 30-2340N 4Ch	UEGO US 20161213.dbc UEGO US 20161213.dbc / PSI / MPH / AFR)
Scaling	Offset	Range	DBC Unit Type
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<== <==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<== <==	<==
<== <==	<==	<== <==	
-	_		<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	\===	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	€==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	C==	<==
<== <==	₹==	<== <==	<==
<==	<==	<== <==	<==
<== <==	<==	<== <==	<==
<==	<==	<== <==	<==
<== <==	<== <==	<== <==	<== <==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
.01 psig/bit	0	0 to 655.35 psig	pressure_gauge:psi(g)

Message ID: 0x000001B2 Sources: AEM 4 Ch UEGO (30-2340) MODE 4 30-2340N same w/11 bit & 1mBit/sec 40ms continuous (25h)

40ms continuous (25hz)										
Byte	Bit	Bitmask	Label	Data Type						
byte	0 (Isb)	0	AFR 2 Ready	Boolean						
	1	2	AFR 2 Heater Open Error	Boolean						
	2	4	AFR 2 VM Error	Boolean						
0	3	8	AFR 2 UN Error	Boolean						
	4	16	AFR 2 IP Error	Boolean						
	5	32	AFR 2 Heater Time-Out Error	Boolean						
	6	64	AFR 2 Heater Short Error	Boolean						
	7 (msb)	128	AFR 2 Overtemp Error	Boolean						
	0 (Isb)	0	AFR 4 Ready	Boolean						
	1	2	AFR 4 Heater Open Error	Boolean						
	2	4	AFR 4 VM Error	Boolean						
1	3	8	AFR 4 UN Error	Boolean						
1	4	16	AFR 4 IP Error	Boolean						
	5	32	AFR 4 Heater Time-Out Error	Boolean						
	6	64	AFR 4 Heater Short Error	Boolean						
	7 (msb)	128	AFR 4 Overtemp Error	Boolean						
	0 (Isb)	0	AFR 6 Ready	Boolean						
	1	2	AFR 6 Heater Open Error	Boolean						
	2	4	AFR 6 VM Error	Boolean						
2	3	8	AFR 6 UN Error	Boolean						
-	4	16	AFR 6 IP Error	Boolean						
	5	32	AFR 6 Heater Time-Out Error	Boolean						
	6	64	AFR 6 Heater Short Error	Boolean						
	7 (msb)	128	AFR 6 Overtemp Error	Boolean						
	0 (Isb)	0	AFR 8 Ready	Boolean						
	1	2	AFR 8 Heater Open Error	Boolean						
	2	4	AFR 8 VM Error	Boolean						
3	3	8	AFR 8 UN Error	Boolean						
3	4	16	AFR 8 IP Error	Boolean						
	5	32	AFR 8 Heater Time-Out Error	Boolean						

		AEW 30-2340 4CH DEGO 31 20101213.UDC				
Contained in	CAN DBC Files*:	AEM 30-2340N 4Ch UEGO SI 20161213.dbc				
		SI Units (C / k	Pa / kph / Lambda)			
Scaling	Offset	Range	DBC Unit Type			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 = false, 1 = true	0	0/1	unitless:			
0 - fake 1 - true	0	0/1	unitlass			

Contained	in CAN DBC Files*:	AEM 30-2340 4Ch UEGO US 20161213.dbc AEM 30-2340N 4Ch UEGO US 20161213.dbc US Units (F/PSI/MPH/AFR)			
Scaling	Offset	Range	DBC Unit Type		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		

1													
	- 6	64	AFR 8 Heater Short Error	Boolean	1 L	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	7 (msb)	128	AFR 8 Overtemp Error	Boolean	JL	0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	0 (Isb)	0	UEGO Low Voltage Error	Boolean] [0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	1	2	EBP sensor ready	Boolean		0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	2	4	EBP sensor Error Low Volt	Boolean	1 [0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
4	3	8	EBP sensor detected	Boolean	1 [0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
-	4	16	CAN Config Mode	Boolean	1 [0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	5	32	CAN Config Mode	Boolean	1 [0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	6	64	CAN Config Mode	Boolean	1 [0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	7 (msb)	128	CAN Config Mode	Boolean	1 [0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	0 (Isb)	0		Boolean	1 [
	1	2		Boolean	1 [
	2	4		Boolean	1 [
5	3	8		Boolean	1 [
	4	16	Sensor 8 Heating up	Boolean	1 [0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	5	32	Sensor 6 Heating up	Boolean	1 [0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	6	64	Sensor 4 Heating up	Boolean	1 [0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
	7 (msb)	128	Sensor 2 Heating up	Boolean	1 [0 = false, 1 = true	0	0/1	unitless:	<==	<==	<==	<==
6-7			Exhaust Pressure 2	16 bit unsigned		0.0689476 kPag/bit	0	0 to 4,518.48 kPag	pressure_gauge:kPa(g)	.01 psig/bit	0	0 to 655.35 psig	pressure_gauge:psi(g)

Message ID: 0x000001B3

Sources: AEM 4 Ch UEGO (30-2340) MODE 5 30-2340N same w/11 bit & 1mBit/sec

40ms continuous (25hz)								
lyte	Bit	Bitmask	Label	Data Type				
	0 (Isb)	0	AFR 9 Ready	Boolean				
0	1	2	AFR 9 Heater Open Error	Boolean				
	2	4	AFR 9 VM Error	Boolean				
	3	8	AFR 9 UN Error	Boolean				
	4	16	AFR 9 IP Error	Boolean				
	5	32	AFR 9 Heater Time-Out Error	Boolean				
	6	64	AFR 9 Heater Short Error	Boolean				
	7 (msb)	128	AFR 9 Overtemp Error	Boolean				
	0 (Isb)	0	AFR 10 Ready	Boolean				
	1	2	AFR 10 Heater Open Error	Boolean				
	2	4	AFR 10 VM Error	Boolean				
1	3	8	AFR 10 UN Error	Boolean				
-	4	16	AFR 10 IP Error	Boolean				
	5	32	AFR 10 Heater Time-Out Error	Boolean				
	6	64	AFR 10 Heater Short Error	Boolean				
	7 (msb)	128	AFR 10 Overtemp Error	Boolean				
	0 (Isb)	0	AFR 11 Ready	Boolean				
	1	2	AFR 11 Heater Open Error	Boolean				
	2	4	AFR 11 VM Error	Boolean				
,	3	8	AFR 11 UN Error	Boolean				
2	4	16	AFR 11 IP Error	Boolean				
	5	32	AFR 11 Heater Time-Out Error	Boolean				
	6	64	AFR 11 Heater Short Error	Boolean				
	7 (msb)	128	AFR 11 Overtemp Error	Boolean				
	0 (Isb)	0	AFR 12 Ready	Boolean				
	1	2	AFR 12 Heater Open Error	Boolean				
	2	4	AFR 12 VM Error	Boolean				
	3	8	AFR 12 UN Error	Boolean				
,	4	16	AFR 12 IP Error	Boolean				
	5	32	AFR 12 Heater Time-Out Error	Boolean				
	6	64	AFR 12 Heater Short Error	Boolean				
	7 (msb)	128	AFR 12 Overtemp Error	Boolean				
	0 (Isb)	0	UEGO Low Voltage Error	Boolean				
	1	2	EBP sensor ready	Boolean				
	2	4	EBP sensor Error Low Volt	Boolean				
	3	8	EBP sensor detected	Boolean				
4	4	16	CAN Config Mode	Boolean				
	5	32	CAN Config Mode	Boolean				
	6	64	CAN Config Mode	Boolean				
	7 (msb)	128	CAN Config Mode	Boolean				
	0 (Isb)	0		Boolean				
	1	2		Boolean				
	2	4		Boolean				
	3	8		Boolean				
5	4	16	Sensor 12 Heating up	Boolean				
	5	32	Sensor 11 Heating up	Boolean				
	6	64	Sensor 10 Heating up	Boolean				
	7 (msb)	128	Sensor 9 Heating up	Boolean				
-7	. ,		Exhaust Pressure 2	16 bit unsigne				

Contained in (CAN DBC Files*:	AEM 30-2340 4Ch UEGO SI 20161213.dbc AEM 30-2340N 4Ch UEGO SI 20161213.dbc SI Units (C / kPa / kph / Lambda)			
Scaling	Offset	Range	DBC Unit Type		
0 = false, 1 = true	0	0/1	unitless:		
	0	0/1			
0 = false, 1 = true 0 = false, 1 = true	0	0/1	unitless: unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitiess:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true 0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1	unitless: unitless:		
0 = false, 1 = true 0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0.0689476 kPag/bit	0	0 to 4,518.48 kPag	pressure_gauge:kPa(g)		

		AEM 30-2340 4Ch UEGO US 20161213.dbc			
Contained in	CAN DBC Files*:	AEM 30-2340N 4Ch U	JEGO US 20161213.dbc		
		US Units (F/	PSI / MPH / AFR)		
Scaling	Offset	Range	DBC Unit Type		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<== <==	<== <==	<== <==	<== <==		
<== <==	<== <==	<== <==	<== <==		
<== <==	<==	<==	<==		
<== <==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
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<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		
<==	<==	<==	<==		

		****	****		
<== <==	<== <==	<== <==	<== <==		
	_				
<== <==	<== <==	<== <==	<== <==		
.01 psig/bit	0	0 to 655.35 psig	pressure_gauge:psi(g)		

Message ID: 0x000001B4 Sources: AEM 4 Ch UEGO (30-2340) MODE 6 30-2340N same w/11 bit & 1mBit/sec

| Digital | Digi

Contained in	CAN DBC Files*:	AEM 30-2340 4Ch UEGO SI 20161213.dbc AEM 30-2340N 4Ch UEGO SI 20161213.dbc SI Units (C / kPa / kph / Lambda)			
Scaling	Offset	Range	DBC Unit Type		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0 = false, 1 = true	0	0/1	unitless:		
0.0689476 kPag/bit	0	0 to 4,518.48 kPag	pressure_gauge:kPa(g)		

Contained i	n CAN DBC Files*:	US Units (F / PSI / MPH / AFR)		
Scaling	Offset	Range	DBC Unit Type	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
.01 psig/bit	0	0 to 655.35 psig	pressure_gauge:psi(g)	

Message ID: 0x000001B5

Sources: AEM 4 Ch UEGO (30-2340) MODE 7
30-2340N same w/11 bit & 1mBit/sec
40ms continuous (25hz)
Bitmask Data Type

Contained in	CAN DBC Files*:	AEM 30-2340N 4Ch UEGO SI 20161213.dbc SI Units (C / kPa / kph / Lambda)		
Scaling	Offset	Range	DBC Unit Type	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 - falce 1 - true	0	0/1	unitlace	

AEM 30-2340 4Ch UEGO SI 20161213.dbc

Contained in Co	AN DBC Files*:	AEM 30-2340 4Ch UEGO US 20161213.dbc AEM 30-2340N 4Ch UEGO US 20161213.dbc US Units (F/PSI/MPH/AFR)		
Scaling	Offset	Range	DBC Unit Type	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	

	0 (Isb)	0	AFR 5 Ready	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
	1	2	AFR 5 Heater Open Error	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
	2	4	AFR 5 VM Error	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
1	3	8	AFR 5 UN Error	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
-	4	16	AFR 5 IP Error	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
	5	32	AFR 5 Heater Time-Out Error	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
	6	64	AFR 5 Heater Short Error	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
	7 (msb)	128	AFR 5 Overtemp Error	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
	0 (lsb)	0	AFR 6 Ready	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
	1	2	AFR 6 Heater Open Error	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
	2	4	AFR 6 VM Error	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
2	3	8	AFR 6 UN Error	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
-	4	16	AFR 6 IP Error	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
	5	32	AFR 6 Heater Time-Out Error	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
	6	64	AFR 6 Heater Short Error	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
	7 (msb)	128	AFR 6 Overtemp Error	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
3				Boolean									
	0 (Isb)	0	UEGO Low Voltage Error	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
	1	2	EBP sensor ready	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
	2	4	EBP sensor Error Low Volt	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
4	3	8	EBP sensor detected	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
	4	16	CAN Config Mode	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
	5	32	CAN Config Mode	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
	6	64	CAN Config Mode	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
	7 (msb)	128	CAN Config Mode	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
	0 (Isb)	0		Boolean									
	1	2		Boolean									
	2	4		Boolean									
5	3	8		Boolean									
1	4	16		Boolean		-							
	5	32	Sensor 6 Heating up	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
1	6	64	Sensor 5 Heating up	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
	7 (msb)	128	Sensor 4 Heating up	Boolean	0 = false, 1	= true	0	0/1	unitless:	<==	<==	<==	<==
6-7			Exhaust Pressure 2	16 bit unsigned	0.0689476	Pag/bit	0	0 to 4,518.48 kPag	pressure_gauge:kPa(g)	.01 psig/bit	0	0 to 655.35 psig	pressure_gauge:psi(g)

Message ID: 0x00000160 Sources: DynoShaft (P/N 30-485X)

65ms continuous (15hz)							
Byte	Bit	Bitmask	Label	Data Type			
0-1			Driveshaft RPM	16 bit unsigned			
2-3			Driveshaft Torque	16 bit signed			
4-5			Driveshaft Power	16 bit signed			
6			Torque Fraction	8 bit unsigned			
7			Power Fraction	8 bit unsigned			

Contained in	CAN DBC Files*:	TBD SI Units (C / kPa / kph / Lambda)			
Scaling	Offset	Range	DBC Unit Type		
1 rpm/bit	0	0 to 65,535 RPM	angular_speed:rpm		
1.35582 Nm/bit	0	-44,426.1 to +44,426.Nm	torque:N.m		
0.7456999 kW/bit	0	-24,434.3 to +24,434.3 kW	power:kW		
.00529616 Nm/bit	0	0 to 1.350445 Nm	torque:N.m		
.00291289 kW/bit	0	0 to 0.742787 kW	power:kW		

Contained in C	AN DBC Files*:	TBD US Units (F/PSI/MPH/AFR)		
Scaling Offset		Range	DBC Unit Type	
<==	<==	<==	<==	
1 ft-lb/bit	0	-32,767 to +32,767 ft-lb	torque:ft.lb	
1 HP/bit	0	-32,767 to +32,767 HP	power:hp	
0.00390625 ft-lb/bit	0	0 to 0.99609375 ft-lb	torque:ft.lb	
0.00390625 HP/bit	0	0 to 0.99609375 HP	power:hp	

Message ID: 0x00000161 Sources: DynoShaft (P/N 30-485X) 65ms continuous (15hz)

Byte	Bit	Bitmask	Label	Data Type
0-1			Driveshaft RPM	16 bit unsigned
2-3			Driveshaft Torque (Low Range)	16 bit signed
4-5			Driveshaft Power (Low Range)	16 bit signed
6				
7				

Contained in C	AN DBC Files*:	TBD SI Units (C / kPa / kph / Lambda)						
Scaling	Offset	Range	DBC Unit Type					
1 rpm/bit	0	0 to 65,535 RPM	angular_speed:rpm					
0.00529616 Nm/bit	0	-173.539 to +173.539 Nm	torque:N.m					
0.00291289 kW/bit	0	-95.4466 to +95.4466 kW	power:kW					

1	Contained in Co	AN DBC Files*:	TBD US Units (F/PSI/MPH/AFR)		
	Scaling	Offset	Range	DBC Unit Type	
	<==	<==	<==	<==	
1	0.00390625 ft-lb/bit	0	-127.996 to +127.996 ft-lb	torque:ft.lb	
1	0.00390625 HP/bit	0	-127.996 to +127.996 HP	power:hp	
1				****	
П					

Message ID: 0x00000162

Sources: DynoShaft (P/N 30-485X)

		0:	oms continuous (15nz)	
Byte	Bit	Data Type		
0			System Voltage	8 bit unsigned
1			Tank Voltage	8 bit unsigned
2			Sensor Voltage	8 bit unsigned
3			Power Level	8 bit unsigned
4			Sensor Temp	8 bit unsigned
5			Drive Frequency	8 bit unsigned
6			System Temp	8 bit unsigned
	0 (Isb)	0		Boolean
	1	2	Auto Zero Active	Boolean
	2	4	LED Aligned	Boolean
7	3	8	Got Good Calibration	Boolean
,	4	16	Got Good Zero Offset	Boolean
	5	32	Sensor Comms Active	Boolean
	6	64	Heartbeat	Boolean
	7 (msb)	128	Sensor Firmware Error	Boolean

Contained in	CAN DBC Files*:	TBD SI Units (C / kPa / kph / Lambda)		
Scaling	Offset	Range	DBC Unit Type	
0.1 V/bit	0	0 to 25.5 Volts	voltage:V	
0.1 V/bit	0	0 to 25.5 Volts	voltage:V	
0.1 V/bit	0	0 to 25.5 Volts	voltage:V	
1%/bit	0	0 to 100 %	fraction:%	
0.555556 Deg C/bit	0	-17.7778 to 123.889 C	temperature:C	
50 hz/bit	18,000	18,000 to 30,750 HZ	frequency:Hz	
0.555556 Deg C/bit	10	10 to 151.667 C	temperature:C	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false 1 = true	0	0/1	unitless:	

Contained in CAN DBC Files*:		TBD US Units (F / PSI / MPH / AFR)	
Scaling	Offset	Range	DBC Unit Type
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
1 Deg F/bit	0	0 to 255 F	temperature:F
<==	<==	<==	<==
1 Deg F/bit	50	50 to 305 F	temperature:F
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==

Message IDs: 0x00000180 to 0x0000018F (up to 16) Sources: AEM X-Series UEGO (30-03XX)

		10	Oms continuous (100hz)	
Byte	Bit	Bitmask	Label	Data Type
0-1			Lambda	16 bit unsigned
2-3			Oxygen	16 bit signed
4			System Volts	8 bit unsigned
5			Heater Volts	8 bit unsigned
	0 (lsb)	0	Bosch LSU4.2 Sensor Detected	Boolean
	1	2	Bosch LSU4.9 Sensor Detected	Boolean
6	2	4	NTK L#H# Sensor Detected	Boolean
	3	8	NTK LHA Sensor Detected	Boolean
0	4	16	Heater PID locked	Boolean
	5	32	Using Free-Air Cal	Boolean
	6	64	Free-Air cal required	Boolean
	7 (msb)	128	Lambda Data Valid	Boolean
	0 (Isb)	0		
	1	2		
	2	4	Sensor State	5 bit unsigned
7	3	8		
,	4	16		
	5	32		Boolean
	6	64	Sensor Fault	Boolean
	7 (msb)	128	Fatal Error	Boolean

dental and to	CAN DBC Files*:	AEM X_SERIES UEGO-SI.dbc SI Units (C / kPa / kph / Lambda)		
Contained in	CAN DBC Files*:			
Scaling	Offset	Range	DBC Unit Type	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA	
0.001%/bit	0	-32.768% to 32.767%	fraction:%	
0.1 V/bit	0	0 to 25.5 Volts	voltage:V	
0.1 V/bit	0	0 to 25.5 Volts	voltage:V	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0=Reset, 1=Warm Up, 2=Stabil Rcal, 6=Run, 7=Overheat, 8= 11=Start FAC, 12=FAC, 13=De 16=Sensor Type, 17=Prepare to	unitless:			
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	

Contract of the	CAN DOC 51*-	AEM X_SERIES	UEGO-US.dbc
Contained in CAN DBC Files*:		US Units (F / PSI / MPH / AFR)	
Scaling	Offset	Range	DBC Unit Type
.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==
<==	<==	<==	<==

Message ID: 0x000A0000

Sources: AEM GPS Gauge (P/N 30-0313) 50ms continuous (20hz)

	Johns Continuous (20112)								
ſ	Byte	Bit	Bitmask	Label	Data Type				
ſ									
ı	0-3			GPS Latitude	32 bit float				
ı				GI S Estitude					
L									
ı									
ı	4-7			GPS Longitude	32 bit float				
ı									
L									

Contained in C	*** DDC 511*-	AEM GPS GAUG	iE 30-0313-Sl.dbc	
Contained in C	AN DBC Files*:	SI Units (C / kPa / kph / Lambda)		
Scaling Offset		Range	DBC Unit Type	
Degrees reference WGS-84 datum North is positive	0	+90.00 (north) to -90.00 (south) Degrees	angle:deg	
Degreesreference WGS-84 datum East is positive	0	+180.00 (east) to -180.00 (west) Degrees	angle:deg	

Contributed to 6	Contained in CAN DBC Files*:		E 30-0313-US.dbc
Contained in CAN DBC Files*:		US Units (F / PSI / MPH / AFR)	
Scaling	Offset	Range	DBC Unit Type
<==	<==	<==	<==
<==	<==	<==	<==

Message ID: 0x000A0001 Sources: AEM GPS Gauge (P/N 30-0313) 50ms continuous (20hz)

	Soms continuous (20n2)									
Byte	Bit	Bitmask	Label	Data Type						
0-1			GPS Speed	16 bit unsigned						
2-3			GPS Altitude	16 bit signed						
4-5			GPS True Course	16 bit unsigned						
6			GPS Satellites in Use	8 bit unsigned						
7			GPS Valid	8 bit unsigned						

	Contained in CAN DBC Files*:	SI Units (C / kPa / kph / Lambda)		
	Scaling	Offset	Range	DBC Unit Type
	0.01609344 kph/bit	0	0 to 1054.684 kph	speed:km/h
	0.3048 meter/bit	0	-9,987.7 to 9,987.4 meters	distance:m
	0.01 deg/bit	0	0 to 655.35 degrees	angle:deg
	1	0	0 to 255	unitless:
	0 = N/G, 1 = OK	0	0 to 255	unitless:

Contained in Co	AN DRC Elect.	AEM GPS GAUGE 30-0313-US.dbc		
Contained in C	AN DBC Files .	US Units (F / PSI / MPH / AFR)		
Scaling	Offset	Range	DBC Unit Type	
0.01 mph/bit	0	0 to 655.35 MPH	speed:mph	
1 ft/bit	0	-32,768 to 32,767 Feet	distance:ft	
<==	<==	<==	<==	
<==	<==	<==	<==	
<==	<==	<==	<==	

Message ID: 0x000A0301 Sources:

: AEM Pressure Gauge 100psig (30-0301)	Contained in CAN DBC Files*:	TBD	Contained in CAN DBC Files*:	TBD
--	------------------------------	-----	------------------------------	-----

50ms continuous (20hz)					SI Units (C / kP	a / kph / Lambda)			US Units (F/F	PSI / MPH / AFR)		
Byte	Bit	Bitmask	Label	Data Type	Scaling	Offset	Range	DBC Unit Type	Scaling	Offset	Range	DBC Unit Type
0-1			Pressure	16 bit unsigned	0.01 bar/bit	0	0 to 655.35 bar	pressure:bar	0.1450377 PSIg/bit	0	0 to 9502.575 PSIg	pressure_gauge:psi(g)

Message	ID:	0x000Δ0302

Sources:	AEM Temperature Gauge 300F (30-0302)
	EOme continuous (20hz)

			50ms continuous (20hz)	
Byte	Bit	Bitmask	Label	Data Type
0-1			Temperature	16 bit unsigned

		TBD SI Units (C / kPa / kph / Lambda)		
Contained in C	AN DBC Files*:			
Scaling	Offset	Range	DBC Unit Type	
1 degC/bit	0	0 to 65535 degC	temperature:C	

Contained in CAN DBC Files*:		TBD			
	contained in CAR DOCTING .		US Units (F / PSI / MPH / AFR)		
	Scaling	Offset	Range	DBC Unit Type	
	1.8 degF/bit	32	0 to 117995 degF	temperature:F	

Message ID: 0x000A0305

Sources:	AEM EGT	Gauge	1800F (30-0305)	
	Oms cont	inuous	(20hz)	

			50ms continuous (20hz)	
Byte	Bit	Bitmask	Label	Data Type
0-1			Temperature	16 bit unsigned

Contained in CAN DBC Files*:		TBD SI Units (C / kPa / kph / Lambda)		
Scaling	Offset	Range	DBC Unit Type	
1 degC/bit	0	0 to 65535 degC	temperature:C	

Contained in CA	N DRC Elles*	TE	BD		
contained in Ca	Contained in CAN DBC Files .		US Units (F / PSI / MPH / AFR)		
Scaling	Offset	Range	DBC Unit Type		
1.8 degF/bit	32	0 to 117995 degF	temperature:F		

Message ID: 0x000A0306

Sources: AEM Boost Gauge 50psia (30-0306)
50ms continuous (20hz)

	Johns Continuous (20112)							
Byte	Byte Bit Bitmask		Label	Data Type				
0-1			Pressure	16 bit unsigned				

Contained in CAN DBC Files*:			Cont	
		SI Units (C / kPa / kph / Lambda) Range DBC Unit Type		Scaling
0.01 bar/bit	0	0 to 655.35 bar	pressure:bar	0.1450377 PSI

Contained in C	AN DBC Files*:	TBD US Units (F/PSI/MPH/AFR)		
Scaling Offset		Range	DBC Unit Type	
0.1450377 PSIg/bit	0	0 to 9502.575 PSIg	pressure_gauge:psi(g)	

Message ID: 0x000A0307 Sources: AEM Pressure Gauge 150psig (30-0307) 50ms continuous (20hz)

Byte	Bit	Bitmask	Label	Data Type				
0-1			Pressure	16 bit unsigned				

Contained in CAN DBC Files*:		TBD SI Units (C / kPa / kph / Lambda)		Contained in CAN DBC Files*:		TBD	
						US Units (F / PSI / MPH / AFR)	
Scaling	Offset	Range	DBC Unit Type	Scaling	Offset	Range	DBC Unit Type
0.01 bar/bit	0	0 to 655.35 bar	pressure:bar	0.1450377 PSIg/bit	0	0 to 9502.575 PSIg	pressure_gauge:psi(g)

Message ID: 0x000A0308

Sources: AEM Pressure Gauge 75psia (30-0308) 50ms continuous (20hz)

Byte Bit Bitmask		Bitmask	Label	Data Type	
0-1			Pressure	16 bit unsigned	

Contained in CAN DBC Files*:		TBD SI Units (C / kPa / kph / Lambda)			Contained in CAN DBC Files*:		TBD	
							US Units (F / PSI / MPH / AFR)	
Scaling	Offset	Range	DBC Unit Type	1	Scaling	Offset	Range	DBC Unit Type
0.01 box/bit	0	O to SEE 3E has	proceuro bar	1	0.14E0277 DSIa/bit	0	O to DED3 E7E DEIa	processo gospanosi(a)

Message ID: 0x000A0309

Sources: AEM Pressure Gauge 15psig (30-0309)

Soms continuous (20n2)							
Byte Bit Bitmask			Label	Data Type			
0-1			Pressure	16 bit unsigned			

		TBD		
Contained in C	AN DBC Files*:	SI Units (C / kP	a / kph / Lambda)	
Scaling Offset		Range	DBC Unit Type	

Contained in CA	AN DBC Files*:	TBD US Units (F / PSI / MPH / AFR)		
Scaling	Offset	Range	DBC Unit Type	
.01 psig/bit	0	0 to 655.35 psig	pressure_gauge:psi(g)	

Message ID: 0x000A0000

Sources: AEM Vehicle Dynamics Module (30-2203) 100ms continuous (10hz)

Byte	Bit	Bitmask	DBC Label	Data Type	
0-3			GPS Latitude	32 bit float	
			_		
4-7			GPS_Longitude	32 bit float	

Contained in C	AN DRC Eilec*:	AEM VDM 30-2203 SI 20161008.dbc		
contained in c	AN DOCTINGS .	SI Units (C / kPa / kph / Lambda)		
Scaling	Offset	Range	DBC Unit Type	
Degrees reference WGS-84 datum North is positive	0	+90.00 (north) to -90.00 (south) Degrees	angle:deg	
Degreesreference WGS-84 datum East is positive	0	+180.00 (east) to -180.00 (west) Degrees	angle:deg	

Contained in C	Contained in CAN DBC Files*:		3 US 20161008.dbc
Contained in CAN OBC Files .		US Units (F / PSI / MPH / AFR)	
Scaling	Offset	Range	DBC Unit Type
<==	<==	<==	<==
<==	<==	<=	<==

Message ID: 0x000A0001

Sources: AEM Vehicle Dynamics Module (30-2203) 100ms continuous (10hz)

Byte	Bit	Bitmask	DBC Label	Data Type
0-1			GPS Speed	16 bit unsigned
2-3			GPS_Altitude	16 bit signed
4-5			GPS_Course	16 bit unsigned
6			GPS_Satellite_Count	8 bit unsigned
7			GPS Valid	8 bit unsigned

Contained in CAN DBC Files*:		AEM VDM 30-220	3 SI 20161008.dbc
		SI Units (C / kPa	/ kph / Lambda)
Scaling	Offset	Range	DBC Unit Type
0.01609344 kph/bit	0	0 to 1054.684 kph	speed:km/h
0.3048 meter/bit	0	-9,987.7 to 9,987.4 meters	distance:m
0.01 deg/bit	0	0 to 655.35 degrees	angle:deg
1	0	0 to 255	unitless:
1	0	0 to 255	unitless:

Contract of the	Contained in CAN DBC Files*:		AEM VDM 30-2203 US 20161008.dbc	
Contained in			/ MPH / AFR)	
Scaling	Offset	Range	DBC Unit Type	
0.01 mph/bit	0	0 to 655.35 MPH	speed:mph	
1 ft/bit	0	-32,768 to 32,767 Feet	distance:ft	
<==	<==	<==	<==	
<==	<==	<==	<==	
	,			

Message ID: 0x000A0002

Sources: AEM Vehicle Dynamics Module (30-2203)

200ms continuous (5nz)						
Byte	Bit	Bitmask	DBC Label	Data Type		
0			GPS_Valid	8 bit unsigned		
1			GPS_Year	8 bit unsigned		
2			GPS_Month	8 bit unsigned		
3			GPS_Day	8 bit unsigned		
4			GPS_Debug_Flags	8 bit unsigned		
5			GPS_Hours	8 bit unsigned		
6			GPS_Minutes	8 bit unsigned		
7			GPS_Seconds	8 bit unsigned		

Contained is	Contained in CAN DBC Files*:		3 31 20101000.ubc
Contained in CAN DBC Files .		SI Units (C / kPa / kph / Lambda)	
Scaling	Offset	Range	DBC Unit Type
0 = N/G, 1 = OK	0	0-255	unitless:
1	2000	2000-2255 Years UTC	unitless:
1	0	0-255 Months UTC	unitless:
1	0	0-255 Days UTC	time:day
1	0	0-255	unitless:
1	0	0-255 Hours UTC	time:h
1	0	0-255 Minutes UTC	time:min
1	0	0-255 Seconds UTC	time:s

1	Contribution dis-		AEM VDM 30-220	3 US 20161008.dbc		
1	Contained in	Contained in CAN DBC Files*:		US Units (F / PSI / MPH / AFR)		
1	Scaling	Offset	Range	DBC Unit Type		
1	<==	<==	<==	<==		
1	<==	<==	<==	<==		
1	<==	<==	<==	<==		
]	<==	<==	<==	<==		
П	<==	<==	<==	<==		
]	<==	<==	<==	<==		
П	<==	<==	<==	<==		
7		-	ć			

Message I 0x000A0003

Sources: AEM Vehicle Dynamics Module (30-2203)

10ms continuous (100hz)							
Byte	Bit	Bitmask	DBC Label	Data Type			
0-1			X_Axis_Accel	16 bit signed			
2-3			Y Axis Accel	16 bit signed			
4-5			Z_Axis_Accel	16 bit signed			
6			-	8 bit unsigned			
7			-	8 bit unsigned			

Contained in	CAN DBC Files*:	AEM VDM 30-22	03 SI 20161008.dbc
Contained in CAN DBC Files .			Pa / kph / Lambda)
Scaling	Offset	Range	DBC Unit Type
0.0002441406 g /bit	0	-8g to +8g	acceleration:G
0.0002441406 g /bit	0	-8g to +8g	acceleration:G
0.0002441406 g /bit	0	-8g to +8g	acceleration:G
1	0		
- 1	0		

	Contained in CA	N DRC Eilec*	AEM VDM 30-220	3 US 20161008.dbc
	contained in Cr	ii bbc mes .		PSI / MPH / AFR)
	Scaling	Offset	Range	DBC Unit Type
	<==	<==	<==	<==
	<==	<==	<==	<==
	<==	<==	<==	<==
	<==	<==	<==	<==
	<==	<==	<==	<==

Message ID: 0x000A0004

Sources: AEM Vehicle Dynamics Module (30-2203)

		lms continuous (100hz)		
Byte	Bit	Bitmask	DBC Label	Data Type
0-1			X_Axis_Yaw_Rate	16 bit signed
2-3			Y Axis Yaw Rate	16 bit signed
4-5			Z_Axis_Yaw_Rate	16 bit signed
6			-	8 bit unsigned
7				8 hit unsigned

Contained in C	AN DRC Ellec*	AEIVI VDIVI 50-2205 SI 20161006.0DC		
contained in c	AIT DOCTINGS .	SI Units (C / kPa	a / kph / Lambda)	
Scaling	Offset	Range	DBC Unit Type	
0.01525879 deg/s/bit	0	-500 deg/s to +500 deg/s	angular_speed:deg/s	
0.01525879 deg/s/bit	0	-500 deg/s to +500 deg/s	angular_speed:deg/s	
0.01525879 deg/s/bit	0	-500 deg/s to +500 deg/s	angular_speed:deg/s	
1	0			
1	0			

	Contained in Co	N DRC Files*-	AEM VDM 30-2203 US 20161008.dbc			
	contained in Co	an obernes .	US Units (F/F	PSI / MPH / AFR)		
1	Scaling	Offset	Range	DBC Unit Type		
1	<==	<==	<==	<==		
1	<==	<==	<==	<==		
1	<==	<==	<==	<==		
1	<==	<==	<==	<==		
1	<==	<==	<==	<==		

Message ID: 0x00000026

Sources: AEM WB Ethanol/Boost Gauge (30-4910)

10ms continuous (100hz) Byte Bit Bitmask Label Data Type										
0-1			Lambda	16 bit unsigned						
2-3			Pressure	16 bit unsigned						
4			Fuel Temperature 8 bit s	8 bit signed						
5			Flex Fuel Ethanol Content	8 bit unsigned						
	0 (Isb)	0	AFR Ready	Boolean						
	1	2	AFR Heater Open Error	Boolean						
	2	4	AFR CJ125 Error	Boolean						
6	3	8	AFR Sensor Heating Up	Boolean						
	4	16	AFR Low Voltage	Boolean						
	5	32	AFR Heater Time-Out Error	Boolean						
	6	64	AFR Heater Short Error	Boolean						
	7 (msb)	128	AFR Overtemp Error	Boolean						
	0 (Isb)	0	Alarm Status	Boolean						
	1	2	Alarm Source	Boolean						
	2	4	Alarm Source	Boolean						
	,	-								

Contained in	CAN DBC Files*:	עפו		
Contained ii		SI Units (C / kPa /	kph / Lambda)	
Scaling	Offset	Range	DBC Unit Type	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA	
0.00689476 kPa/bit	-2.09636	-2.09636 to 449.752 kPa	pressure:kPa	
1 degC/bit	0	-40 degC to 125 degC	temperature:C	
1 %/bit	0	0 to 100%	fraction:%	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 = false, 1 = true	0	0/1	unitless:	
0 felse 4 here	0	0/4		

	Contract of the	CAN DBC Files*:	TBD US Units (F / PSI / MPH / AFR)		
	Contained in	CAN DBC HIES*:			
	Scaling Offset		Range	DBC Unit Type	
	.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline	
	.001 PSI/bit	-15	-15 to 50.535 PSI	pressure_gauge:psi(g)	
	1.8 degF/bit	32	-40 degF to 284 degF	temperature:F	
	<==	<==	<==	<==	
	<==	<==	<==	<==	
	<==	<==	<==	<==	
	<==	<==	<==	<==	
	<==	<==	<==	<==	
	<==	<==	<==	<==	
	<==	<==	<==	<==	
	<==	<==	<==	<==	
	<==	<==	<==	<==	
1	<==	<==	<==	<==	
	<==	<==	<==	<==	
	<==	<==	<==	<==	

4	16	 Boolean		 		 	 	
5	32	 Boolean	Γ	 		 	 	
6	64	 Boolean	Г	 	-	 	 	
7 (msb)	128	 Boolean	Γ	 		 	 	

Message ID: 0x00000027 Sources: AEM WB Ethanol/Boost Gauge (30-4910)

10ms continuous (100hz)								
Byte	Bit	Bitmask	Label	Data Type				
0-1			Lambda Upper Limit	16 bit unsigned				
2-3			Lambda Lower Limit	16 bit unsigned				
4-5			Alarm Delay Limit	16 bit unsigned				
6-7			Alarm Delay Counter	16 bit unsigned				

Contained in C	AN DBC Files*:	TBD SI Units (C / kPa / kph / Lambda)				
Scaling	Offset	Range	DBC Unit Type			
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA			
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA			
1 mS/bit	0	0 to 65,535 mS	time:ms			
1 mS/bit	0	0 to 65,535 mS	time:ms			

	Contained in CA	AN DBC Files*:	· ·	BD PSI / MPH / AFR)
	Scaling	Offset	Range	DBC Unit Type
	.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline
Ī	.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline
Ī	<==	<==	<==	<==
Г	<==	<==	<==	<==

Message ID: 0x0000028
Sources: AEM WB Ethanol/Boost Gauge (30-4910)
10ms (100hz) only in alarm mode

Byte Bit Bitmask Label Data Tyree

Alarm 1 semb-1 Data Tyree 2-3 Alarm Pressure 16 bit unsigned 4-5

Contained in (CAN DBC Files*:	TBD SI Units (C / kPa / kph / Lambda)				
Scaling	Offset	Range	DBC Unit Type			
.0001 Lambda/bit	0	0 to 6.5535 Lambda	afr:LA			
0.00689476 kPa/bit	-2.09636	-2.09636 to 449.752 kPa	pressure:kPa			
1 mS/bit	0	0 to 65,535 mS	time:ms			
1 mS/bit	0	0 to 65,535 mS	time:ms			

	Contained in Co	AN DBC Files*:	-	BD PSI / MPH / AFR)
1	Scaling	Offset	Range	DBC Unit Type
	.001465 AFR/bit	0	0 to 96.0088 AFR	afr:AFR Gasoline
	.001 PSI/bit	-15	-15 to 50.535 PSI	pressure_gauge:psi(g)
	<==	<==	← ==	<==
	<==	<==	<==	<==