**AEMnet v150505** 

**CAN 2.0** 

Unless otherwise specified all messages are;

29 bit, 500 kBit/sec, 8 data bytes per message

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: AEM V2 & EMS-4 (30-6XXX) Infinity EMS (30-71XX)

20ms continuous (50hz)

SI Units ( C / kPa / kph / Lambda )

US Units (F/PSI/MPH/AFR)

Byte	Bit	Bitmask	Label	Data Type
0-1			Engine Speed	16 bit unsigned
2-3			Engine Load (Deprecated 2014) 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 bit signed, 2's comp

Scaling	Offset	Range
0.39063 rpm/bit	0	0 to 25,599.94 RPM
0.00261230481157781	0	0 to 99.998 %
0.0015259 %/bit	0	0 to 99.998 %
1 Deg C/bit	0	-128 to 127 C
1 Deg C/bit	0	-128 to 127 C

Scaling	Offset	Range		
<==	<==	<==		
<==	<==	<==		
<==	<==	<==		
1.8 Deg F/bit	32	-198.4 to 260.6 F		
1.8 Deg F/bit	32	-198.4 to 260.6 F		

Message ID: 0x01F0A001

Sources: AEM V2 & EMS-4 (30-6XXX)

20ms continuous (50hz)

SI Units ( C / kPa / kph / Lambda )

US Units (F / PSI / MPH / AFR)

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

Scaling	Offset	Range			
0.00007782 V/bit	0	0 to 5.0999 V			
0.00007782 V/bit	0	0 to 5.0999 V			
0.00007782 V/bit	0	0 to 5.0999 V			
0.00007782 V/bit	0	0 to 5.0999 V			

Scaling	Offset	Range
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==

Message ID: 0x01F0A002

Sources: AEM V2 & EMS-4 (30-6XXX)

20ms continuous (50hz)

SI Units ( C / kPa / kph / Lambda )

US Units ( F / PSI / MPH / AFR )

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

Scaling	Offset	Range
0.00007782 V/bit	0	0 to 5.0999 V
0.00007782 V/bit	0	0 to 5.0999 V
0.00007782 V/bit	0	0 to 5.0999 V
0.000326 V/bit	0	0 to 21.3644 V

Scaling	Offset	Range
<==	<==	<b>&lt;==</b>
<==	<==	<==
<==	<==	<==
<==	<==	<==

Message ID: 0x01F0A003

Sources: AEM V2 & EMS-4 (30-6XXX) Infinity EMS (30-71XX)

20ms continuous (50hz)

SI Units ( C / kPa / kph / Lambda )

US Units (F / PSI / MPH / AFR)

			20113 00	//////////////////////////////////////
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

Si Olitis ( C / Ki a / Kpii / Lailibda /				
Scaling	Offset	Range		
0.00390625 Lambda/bit	0.5	0.5 to 1.496 Lambda		
0.00390625 Lambda/bit	0.5	0.5 to 1.496 Lambda		
0.0062865 kph/bit	0	0 to 411.986 km/h		
1	0	0 to 255		
.35156 Deg/bit	-17	-17 to 72.65 Deg		
0.0002455 V/bit	0	0 to 16.089 Volts		

Scaling	Offset	Range			
0.057227 AFR/bit	7.325	7.325 to 21.916 AFR			
0.057227 AFR/bit	7.325	7.325 to 21.916 AFR			
0.00390625 mph/bit	0	0 to 255.996 MPH			
<==	<==	<==			
<b>&lt;==</b>	<==	<==			
<==	<==	<==			

Message ID: 0x01F0A004

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

US Units (F/PSI/MPH/AFR)

20ms continuous (5						
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 unsigne			
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		
ь	4	16	O2FB Active	Boolean		
	5	32	EngineProtectOut	Boolean		
	6	64	MILOutput	Boolean		

Si Units ( C / KPa / Kpn / Lambda )							
Offset	Range						
0	0 to 6,553.5 kPa						
0	0 to 255 %						
0	0 to 147.939 PSIg						
0	0 to 147.939 PSIg						
0.5	0.5 to 1.496 Lambda						
0	0/1						
0	0/1						
0	0/1						
0	0/1						
0	0/1						
0	0/1						
0	0/1						
	Offset  0  0 0 0 0 0.5 0 0 0 0 0 0 0 0 0 0 0						

, , , , , ,						
Scaling	Offset	Range				
0.014504 PSI/bit	-14.6960	-14.696 to 935.81 PSIg				
<==	<==	<==				
<==	<==	<==				
<==	<==	<==				
0.057227 AFR/bit	7.325	7.325 to 21.916 AFR				
<==	<==	<==				
<==	<==	<==				
<==	<==	<==				
<==	<==	<==				
<==	<==	<==				
<==	<==	<==				
<==	<==	<==				

	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		Boolean
	7 (mch)	120		Rooloan

0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1

<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==

# Message ID: 0x01F0A005

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

20ms continuous (50hz)

SI Units	( C /	kPa	/ kph	/ Lambda

US Units ( F / PSI / MPH / AF	R

Zonis continuous (Son						
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 (lsb)	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		

Si Units ( C / KPa / Kpn / Lambda )						
Scaling	Offset	Range				
10 mS/bit	0	0 to 655,350 mS				
.05 [gms/s] / bit	0	0 to 3,276.75 gms/s				
.0005 [gms/rev] / bit	0	0 to 32.7675 gms/rev				
5 PSIg/bit	0	0 to 1275 PSIg				
0 = false, 1 = true	0	0/1				
0 = false, 1 = true	0	0/1				
0 = false, 1 = true	0	0/1				
0 = false, 1 = true	0	0/1				

US UNITS (F / PSI / IVIPH / AFR )							
Offset	Range						
<==	<==						
0	0 to 433.440 lb/min						
0	0 to 4.3344 lb/rev						
<==	<==						
<==	<==						
<==	<==						
<==	<==						
<==	<==						
	Offset <== 0 0 <== <== <== <== <== <==						

### Message ID: 0x01F0A006

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

40ms continuous (25hz)

SI Units (	C / kPa	/knh	/ Lamhda

IIS IInite	(F	DSI	/ MDH	/ AFR \

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			Crankcase Pressure	8 bit unsigned
6-7			Est Torque	16 bit unsigned

Si Gilles ( C / Ki a / Kpii / Lailibaa /					
Scaling	Offset	Range			
0.1 mS/bit	0	0 to 25.5 mS			
0.5 %/bit	-64.00	-64 to 63.5 %			
0.392157 %/bit	0	0 to 100 %			
1 /bit	0	0 - 255			
0.580151 PSIg/bit	0	0 to 147.939 PSIg			
1 kPa/bit	0	0 to 255 kPa			
0.1 Nm/bit	-3276.8	-3276.8 to 3276.7			

Scaling	Offset	Range
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
0.14504 PSI/bit	-14.696	-14.696 to 22.289 PSIg
0.0737562 ft-lbs/bit	0	+/- 2416.77 ft-lbs

#### Message ID: 0x01F0A007

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

40ms continuous (25hz)

SI Units	C.	/ kPa	/ kph	/ Lambda

US Units	F/	PSI	/ MPH	/ AFR	١

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 (lsb)	0	LaunchTimerArmed	Boolean
	1	2	Logging Active	Boolean
	2	4	MadaCalast Iss	2 bit unsigned
7	3	8	ModeSelect_lgn	2 bit unsigned
,	4	16	MandaCalant Involude	2 bitinned
	5	32	ModeSelect_Lambda	2 bit unsigned
	6	64	ModeSelect_DBW	1 bit unsigned
	7 (msb)	128	VTEC	Boolean

Scaling	Offset	Range			
0.392157 %/bit	0	0 to 100 %			
0.392157 %/bit	0	0 to 100 %			
0.001 Lambda/bit	0	0 to 0.255 Lambda			
0.25 kPa/bit	50	50 to 113.75 kPa			
0.392157 %/bit	0	0 to 100 %			
1 Deg C/bit	-50.00	-50 to 205 C			
1 Deg C/bit	-50.00	-50 to 205 C			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
####00## = Mode 1, ####01## = Mode 2					
####10## =	####10## = Mode 3, ####11## = Mode 4				
##00#### =	Mode 1, ##0	1#### = Mode 2			
##10#### = Mode 3, ##11#### = Mode 4					
#0###### = Mode 1, #1##### = Mode 2					
0 = false, 1 = true	0 = false, 1 = true 0 0/1				
·		·			

Scaling	Offset	Range
<==	<==	<==
<==	<==	<==
0.01465 AFR/bit	0	0 to 3.73575 AFR
0.073825 inHg/bit	14.76	14.76 to 33.5903 inHg
<==	<==	<==
1.8 Deg F/bit	-58	-58 to 401 F
1.8 Deg F/bit	-58	-58 to 401 F
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==

## Message ID: 0x01F0A008

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

200ms continuous (5hz)

### SI Units ( C / kPa / kph / Lambda )

## US Units (F / PSI / MPH / AFR)

			2001115 (	Jonania (3112)
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 (lsb)	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

5. 55 (c) n. a / np/ 205 da /					
Scaling	Offset	Range			
1 Deg C/bit	-50.00	-50 to 205 C			
0.39063 rpm/bit	0	0 to 25,599.94 RPM			
0.39063 rpm/bit	0	0 to 25,599.94 RPM			
100 rpm/bit	0	0 to 25,500 RPM			
100 rpm/bit	0	0 to 25,500 RPM			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			

Scaling	Offset	Range
1.8 Deg F/bit	-58	-58 to 401 F
<==	<==	<b>&lt;==</b>
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==

### Message ID: 0x01F0A00A

Sources: Infinity EMS (30-71XX) V96.1 and Later, with VVTi control enabled

40ms continuous (25hz) SI Units ( C / kPa / kph / Lambda ) US Units ( F / PSI / MPH / AFR )

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				
_				

BoostTarget

ChargeOutPress

BoostControl [%]

BoostFB PID [%]

ChargeOutTemp

2-3

Scaling	Offset	Range
0.5 deg/bit	-50	-50 to 77.5 deg
0.5 deg/bit	-50	-50 to 77.5 deg
0.5 deg/bit	-50	-50 to 77.5 deg
0.5 deg/bit	-50	-50 to 77.5 deg
0.5 deg/bit	-50	-50 to 77.5 deg
0.5 deg/bit	-50	-50 to 77.5 deg

Scaling	Offset	Range
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==

### Message ID: 0x01F0A00B

# Sources: Infinity EMS (30-71XX) V96.1 and Later, with Boost control enabled

40ms continuous (25hz)

Data Type

16 bit unsigned

16 bit unsigned

8 bit unsigned

8 bit unsigned

8 bit unsigned

SI Units ( C / kPa / kph / Lambda )						
Scaling	Offset	Range				
0.1 kPa/bit	0	0 to 6,553.5 kPa				
0.1 kPa/bit	0	0 to 6,553.5 kPa				
0.392157 %/bit	0	0 to 100 %				
0.392157 %/bit	0	0 to 100 %				
1 Deg C/bit	-50.00	-50 to 205 C				
E00 /b:+	0	0 to 127 FOO DDM				

US Units ( F / PSI / MPH / AFR )						
Scaling	Offset	Range				
0.014504 PSI/bit	-14.6960	-14.696 to 935.81 PSIg				
0.014504 PSI/bit	-14.6960	-14.696 to 935.81 PSIg				
<==	<==	<==				
<==	<==	<==				
1.8 Deg F/bit	-58	-58 to 401 F				
<==	<==	<==				

### Message ID: 0x01F0A00D

# Sources: Infinity EMS (30-71XX) V96.1 and Later, with DBW control enabled

40ms continuous (25hz)

SI	Units (	c/	kPa/	kph /	Lambda )
••	Omics (	٠,	KI U /	KPII /	Laiiibaa ,

IIC IInite	/ E	/ DCI	/ MADI	1	AED 1	١

	40113 CONTINUOUS (251)					
Byte	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		
5	4	16		Boolean		
	5	32		Boolean		
	6	64		Boolean		
	7 (msb)	128		Boolean		
	0 (lsb)	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		
0	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		

Scaling	Offset	Range
0.392157 %/bit	0	0 to 100 %
0.392157 %/bit	0	0 to 100 %
0.392157 %/bit	0	0 to 100 %
0.392157 %/bit	0	0 to 100 %
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1

Scaling	Unset	Kange
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==

### Message ID: 0x01F0A010

# Sources: Infinity EMS (30-71XX) V96.1 and Later, with Traction control enabled

20ms continuous (50hz)

SI Units	( C / kPa	/ kph /	Lambda )	į

US Units	( F / PSI /	MPH / AFR )

Zonis continuous				
Byte	Bit	Bitmask	Label	Data Type
0			TC_FuelCut [%]	8 bit unsigned
1			TC_SparkCut [%]	8 bit unsigned
2			TC_Retard [degBTDC]	8 bit unsigned
3			TC_TqReduceDBW [%]	8 bit unsigned
4			TC_ Mode_Sw	8 bit unsigned
5			3StepTargetFuel [RPM]	8 bit unsigned
6			3StepTargetSpark [RPM]	8 bit unsigned
	0 (lsb)	0	3 Step Fuel	Boolean
	1	2	3 Step Spark	Boolean
	2	4	3 Step Sw	Boolean
7	3	8		Boolean
,	4	16		Boolean
	5	32		Boolean
	6	64		Boolean
	7 (msb)	128		Boolean

Scaling	Offset	Range
0.392157 %/bit	0	0 to 100 %
0.392157 %/bit	0	0 to 100 %
0.25 deg/bit	0	0 to 63.75 deg
0.392157 %/bit	0	0 to 100 %
1 /bit	0	0 - 255
100 rpm/bit	0	0 to 25,500 RPM
100 rpm/bit	0	0 to 25,500 RPM
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1

Scaling	Offset	Range
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==

### Message ID: 0x01F0A011

### Sources: Infinity EMS (30-71XX) V96.1 and Later, with Traction control enabled

20ms continuous (50hz)

Units (C/	kPa / kph /	Lambda
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US Units ( F / PSI / MPH / AFR )

			201113 CC	milinadas (Jonz)
Byte	Bit	Bitmask	Label	Data Type
0-1			DLWheelSpeed	16 bit unsigned
2-3			DRWheelSpeed	16 bit unsigned
4-5			NLWheelSpeed	16 bit unsigned

Scaling	Offset	Range			
0.02 kph/bit	0	0 to 1310.7 km/h			
0.02 kph/bit	0	0 to 1310.7 km/h			
0.02 kph/bit	0	0 to 1310.7 km/h			

Scaling	Offset	Range
0.0124274 mph/bit	0	0 to 814.431 MPH
0.0124274 mph/bit	0	0 to 814.431 MPH
0.0124274 mph/bit	0	0 to 814.431 MPH

6-7		NRWheelSpeed	16 bit unsigned

TC\_SlipTarget

TC\_SlipMeasured

TC\_TqReduceReq

Bit Bitmask

Byte

2-3

4-5

0.02 kph/bit	0	0 to 1310.7 km/h
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0.0124274 mph/bit	0	0 to 814.431 MPH
-------------------	---	------------------

#### Message ID: 0x01F0A012

# Sources: Infinity EMS (30-71XX) V96.1 and Later, with Traction control enabled

20ms continuou

inuous (50hz)		
Data Type		
16 bit unsigned		
16 bit unsigned		
16 bit unsigned		
		Г

SI Units ( C / kPa / kph / Lambda )			
Scaling	Offset	Range	
0.02 kph/bit	0	0 to 1310.7 km/h	
0.02 kph/bit	0	0 to 1310.7 km/h	
0.25/bit	0	0 to 16,383.75	

US Units ( F / PSI / MPH / AFR )				
Scaling	Offset	Range		
0.0124274 mph/bit	0	0 to 814.431 MPH		
0.0124274 mph/bit	0	0 to 814.431 MPH		
<==	<==	<==		

#### Message ID: 0x01F0A020

### Sources: Infinity EMS (30-71XX) V96.1 and Later, with Knock control enabled

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			KnockER Cvl8	8 hit unsigned

Lahel

KnockFB\_Cyl9

KnockFB Cyl10

SI Units ( C / kPa / kph / Lambda )			
Scaling	Offset	Range	
- 0.1 degree/bit	0	0 to -25.5 deg	
- 0.1 degree/bit	0	0 to -25.5 deg	
- 0.1 degree/bit	0	0 to -25.5 deg	
- 0.1 degree/bit	0	0 to -25.5 deg	
- 0.1 degree/bit	0	0 to -25.5 deg	
- 0.1 degree/bit	0	0 to -25.5 deg	
- 0.1 degree/bit	0	0 to -25.5 deg	
- 0.1 degree/bit	0	0 to -25.5 deg	

OS OHIES (F/ FSI / WIFTI / AFR )			
Scaling	Offset	Range	
<==	<==	<==	
<==	<==	<==	
<==	<==	<==	
<==	<==	<==	
<==	<==	<==	
<==	<==	<==	
<==	<==	<==	
<==	<==	<==	

US Units ( F / PSI / MPH / AFR )

#### Message ID: 0x01F0A021

#### Sources: Infinity EMS (30-71XX) V96.1 and Later, with Extended Knock control enabled

20ms continuous (50hz)

Data Type

8 bit unsigned

8 bit unsigned

Si Units ( C / KPa / Kpn / Lambda )			
Scaling	Offset	Range	
- 0.1 degree/bit	0	0 to -25.5 deg	
- 0.1 degree/bit	0	0 to -25.5 deg	

US Units ( F / PSI / MPH / AFR )			
Scaling	Offset	Range	
<==	<==	<==	
<==	<==	<==	

## Message ID: 0x000001F

Sources: AEM 4 Channel UEGO (P/N 30-2340) set on MODE 1

30-2340N is the same except 11 bit messages headers and at 1 mBit/sec bus speed

			Toms cor	itinuous (100nz)
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

Si Units ( C / KPa / Kpn / Lambda )			
Scaling	Offset	Range	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	

US Units ( F / PSI / MPH / AFR )				
Scaling	Offset	Range		
.001465 AFR/bit	0	0 to 96.0088 AFR		
.001465 AFR/bit	0	0 to 96.0088 AFR		
.001465 AFR/bit	0	0 to 96.0088 AFR		
.001465 AFR/bit	0	0 to 96.0088 AFR		

# Message ID: 0x00000020

Sources: AEM 4 Channel UEGO (P/N 30-2340) set on MODE 2

30-2340N is the same except 11 bit messages headers and at 1 mBit/sec bus speed

10ms continuous (100hz)

SI Uni	ts ( C / kPa / kp	( C / kPa / kph / Lambda		
Scaling	Offset			

Scaling	Offset	Range
.001465 AFR/bit	0	0 to 96.0088 AFR
.001465 AFR/bit	0	0 to 96.0088 AFR
004.465.450.00		01.000000450

10113 CONTINUOUS (100				111114043 (100112)
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

.0001 Lambda/bit	0	0 to 6.5535 Lambda
.0001 Lambda/bit	0	0 to 6.5535 Lambda
.0001 Lambda/bit	0	0 to 6.5535 Lambda
.0001 Lambda/bit	0	0 to 6.5535 Lambda

Scaling	Unset	Kange
.001465 AFR/bit	0	0 to 96.0088 AFR
.001465 AFR/bit	0	0 to 96.0088 AFR
.001465 AFR/bit	0	0 to 96.0088 AFR
.001465 AFR/bit	0	0 to 96,0088 AFR

US Units (F/PSI/MPH/AFR)

#### Message ID: 0x00000021

Sources: AEM 4 Channel UEGO (P/N 30-2340) set on MODE 3

30-2340N is the same except 11 bit messages headers and at 1 mBit/sec bus speed

10ms continuous (100hz)

Toms Continuous (10				
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

SI Units ( C / kPa / kph / Lambda )			
Scaling	Offset	Range	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	

US Units ( F / PSI / MPH / AFR )				
Scaling	Offset	Range		
.001465 AFR/bit	0	0 to 96.0088 AFR		
.001465 AFR/bit	0	0 to 96.0088 AFR		
.001465 AFR/bit	0	0 to 96.0088 AFR		
.001465 AFR/bit	0	0 to 96.0088 AFR		

Message ID: 0x00000022

Lambda 2

Lambda 4

Lambda 6

Lambda 9

Lambda 10

Lambda 11

Lambda 12

Lambda 1

Lambda 2

Byte

0-1

4-5

6-7

Byte

2-3

4-5

6-7

Byte

2-3

Bit Bitmask

Bit Bitmask

Sources: AEM 4 Channel UEGO (P/N 30-2340) set on MODE 4

30-2340N is the same except 11 bit messages headers and at 1 mBit/sec bus speed SI Units ( C / kPa / kph / Lambda )

0 to 6.5535 Lambda

0 to 6.5535 Lambda

10ms continuous (100hz)

Data Type

16 bit unsigned

16 bit unsigned

16 bit unsigned

16 bit unsigned

Scaling	Offset	Range
.0001 Lambda/bit	0	0 to 6.5535 Lambda
.0001 Lambda/bit	0	0 to 6.5535 Lambda

0

US Units ( F / PSI / MPH / AFR )				
Scaling Offset		Range		
.001465 AFR/bit	0	0 to 96.0088 AFR		
.001465 AFR/bit	0	0 to 96.0088 AFR		
.001465 AFR/bit	0	0 to 96.0088 AFR		
.001465 AFR/bit	0	0 to 96.0088 AFR		

Message ID: 0x00000023

Sources: AEM 4 Channel UEGO (P/N 30-2340) set on MODE 5

.0001 Lambda/bit

.0001 Lambda/bit

30-2340N is the same except 11 bit messages headers and at 1 mBit/sec bus speed

10ms continuous (100hz)

uous (100nz)	
Data Type	Scal
16 bit unsigned	.0001 Lan

SI Units ( C / kPa / kph / Lambda )				
Scaling	Offset	Range		
.0001 Lambda/bit	0	0 to 6.5535 Lambda		
.0001 Lambda/bit	0	0 to 6.5535 Lambda		
.0001 Lambda/bit	0	0 to 6.5535 Lambda		
.0001 Lambda/bit	0	0 to 6.5535 Lambda		

US UTILIS (F/PSI/MPH/AFK)				
Scaling	Offset	Range		
.001465 AFR/bit	0	0 to 96.0088 AFR		
.001465 AFR/bit	0	0 to 96.0088 AFR		
.001465 AFR/bit	0	0 to 96.0088 AFR		
.001465 AFR/bit	0	0 to 96.0088 AFR		

Message ID: 0x00000024

Sources: AEM 4 Channel UEGO (P/N 30-2340) set on MODE 6

30-2340N is the same except 11 bit messages headers and at 1 mBit/sec bus speed

10ms continuous (100hz)

continuous (100112)			
	Data Type		
	16 bit unsigned		

16 bit unsigned 16 bit unsigned

SI Units ( C / kPa / kph / Lambda )			
Scaling Offset Range			
.0001 Lambda/bit	0	0 to 6.5535 Lambda	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	

US Units ( F / PSI / MPH / AFR )				
Scaling	Offset	Range		
.001465 AFR/bit	0	0 to 96.0088 AFR		
.001465 AFR/bit	0	0 to 96.0088 AFR		
.001465 AFR/bit	0	0 to 96.0088 AFR		

Message ID: 0x00000025

Sources: AEM 4 Channel UEGO (P/N 30-2340) set on MODE 7

30-2340N is the same except 11 bit messages headers and at 1 mBit/sec bus speed

			Toms cor	itinuous (100nz)
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				

Si Units ( C / KPa / Kpn / Lambda )			
Scaling Offset Range			
.0001 Lambda/bit	0	0 to 6.5535 Lambda	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	
.0001 Lambda/bit	0	0 to 6.5535 Lambda	

US Units ( F / PSI / MPH / AFR )				
Scaling	Offset	Range		
.001465 AFR/bit	0	0 to 96.0088 AFR		
.001465 AFR/bit	0	0 to 96.0088 AFR		
.001465 AFR/bit	0	0 to 96.0088 AFR		

Message ID: 0x00000026

Sources: AEM Wideband Failsafe Gauge (P/N 30-4900)

SI Units	( C / kPa /	kph /	Lambda )	)
				_

			10ms cor	tinuous (100hz)
Byte	Bit	Bitmask	Label	Data Type
0-1			Lambda	16 bit unsigned
2-3			Pressure	16 bit unsigned
4-5			RPM	16 bit unsigned
	0 (lsb)	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
ь	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 (lsb)	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

SI Units ( C / kPa / kph / Lambda )					
Scaling	Offset	Range			
.0001 Lambda/bit	0	0 to 6.5535 Lambda			
0.00689476 kPa/bit	-2.09636	-2.09636 to 449.752 kPa			
.39063 RPM/bit	0	0 to 25,600 RPM			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			

US Units ( F / PSI / MPH / AFR )					
Scaling Offset Range					
.001465 AFR/bit	0	0 to 96.0088 AFR			
.001 PSI/bit	-15	-15 to 50.535 PSI			
<==	<==	<==			
<==	<==	<==			
<==	<==	<==			
<==	<==	<==			
<==	<==	<==			
<==	<==	<==			
<==	<==	<==			
<==	<==	<==			
<==	<==	<==			
<==	<==	<==			
<==	<==	<==			
<==	<==	<==			
<==	<==	<==			

Message ID: 0x00000027

Sources: AEM Wideband Failsafe Gauge (P/N 30-4900)

10ms continuous (100hz)

	SI Units	( C / kPa / kp	h / Lambda )
caling		Offset	

US Units (F / PSI / MPH / AFR)

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

Label

Alarm Lambda

Alarm Pressure

Alarm Reset Limit

Alarm Reset Counter

Bit Bitmask

Byte

0-1

2-3

4-5

Scaling	Offset	Range		
.0001 Lambda/bit	0	0 to 6.5535 Lambda		
.0001 Lambda/bit	0	0 to 6.5535 Lambda		
1 mS/bit	0	0 to 65,535 mS		
1 mS/bit	0	0 to 65,535 mS		

Scaling	Offset	Range		
.001465 AFR/bit	0	0 to 96.0088 AFR		
.001465 AFR/bit	0	0 to 96.0088 AFR		
<==	<==	<==		
<==	<==	<==		

Message ID: 0x00000028

Sources: AEM Wideband Failsafe Gauge (P/N 30-4900)

10ms (100hz) only in alarm mode

31 Ollits (C/ KFa / Kpii / Lailibua )						
Scaling	Offset	Range				
.0001 Lambda/bit	0	0 to 6.5535 Lambda				
0.00689476 kPa/bit	-2.09636	-2.09636 to 449.752 kPa				
1 mS/bit	0	0 to 65,535 mS				

US UTILLS (F / PSI / IVIPH / AFK )						
Scaling	Offset	Range				
.001465 AFR/bit	0	0 to 96.0088 AFR				
.001 PSI/bit	-15	-15 to 50.535 PSI				

Message ID: 0x000001AF

Sources: AEM 4 Channel UEGO (P/N 30-2340) set on MODE 1

1 mS/bit

30-2340N is the same except 11 bit messages headers and at 1 mBit/sec bus speed

40ms continuous (25hz)

Data Type

16 bit unsigned

16 bit unsigned

16 bit unsigned

16 bit unsigned

SI Units ( C / kPa / kph / Lambda )

0 to 65,535 mS

US Units (F / PSI / MPH / AFR)

					SI Units ( C / kPa / kph / Lambda )			US Units ( F / PSI / MPH / AFR )			
Byte	Bit	Bitmask	Label	Data Type	Scaling	Offset	Range	Scaling	Offset	Range	
	0 (lsb)	0	AFR 1 Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	1	2	AFR 1 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
0	2	4	AFR 1 VM Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
0	3	8	AFR 1 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
0	4	16	AFR 1 IP Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	5	32	AFR 1 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	6	64	AFR 1 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	7 (msb)	128	AFR 1 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	0 (lsb)	0	AFR 2 Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	1	2	AFR 2 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	2	4	AFR 2 VM Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
1	3	8	AFR 2 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
1	4	16	AFR 2 IP Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	5	32	AFR 2 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	6	64	AFR 2 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	7 (msb)	128	AFR 2 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	0 (lsb)	0	AFR 3 Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	1	2	AFR 3 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	2	4	AFR 3 VM Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
_	3	8	AFR 3 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
2	4	16	AFR 3 IP Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	5	32	AFR 3 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	6	64	AFR 3 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	7 (msb)	128	AFR 3 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	0 (lsb)	0	AFR 4 Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	1	2	AFR 4 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	2	4	AFR 4 VM Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	3	8	AFR 4 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
3	4	16	AFR 4 IP Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	5	32	AFR 4 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	6	64	AFR 4 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	7 (msb)	128	AFR 4 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	0 (lsb)	0	UEGO Low Voltage Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	1	2	EBP sensor ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	2	4	EBP sensor Error Low Volt	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
_	3	8	EBP sensor detected	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
4	4	16	CAN Config Mode	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	5	32	CAN Config Mode	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	6	64	CAN Config Mode	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	7 (msb)	128	CAN Config Mode	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	0 (lsb)	0	Reserved	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	1	2	Reserved	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	2	4	Reserved	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	3	8	Reserved	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
5	4	16	Sensor 4 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	5	32	Sensor 3 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	6	64	Sensor 2 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	7 (msb)	128	Sensor 1 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==	
	. (55)	120			·						
6-7			Exhaust Pressure 1	16 bit unsigned	0.00689476 kPag/bit	0	0 to 4,518.48 kPag	.001 psig/bit	0	0 to 655.35 psig	

Message ID: 0x000001B0

Sources: AEM 4 Channel UEGO (P/N 30-2340) set on MODE 2

30-2340N is the same except 11 bit messages headers and at 1 mBit/sec bus speed

		40ms continuous (25hz)			SI Units	SI Units ( C / kPa / kph / Lambda )			US Units ( F / PSI / MPH / AFR )			
Byte	Bit	Bitmask	Label	Data Type	Scaling	Offset	Range	Sc	caling	Offset	Range	

	Lants			
0	0 (lsb)	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
	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 (lsb)	0	AFR 6 Ready	Boolean
	1	2	AFR 6 Heater Open Error	Boolean
	2	4	AFR 6 VM Error	Boolean
1	3	8	AFR 6 UN Error	Boolean
1	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 (lsb)	0	AFR 7 Ready	Boolean
	1	2	AFR 7 Heater Open Error	Boolean
	2	4	AFR 7 VM Error	Boolean
2	3	8	AFR 7 UN Error	Boolean
2	4	16	AFR 7 IP Error	Boolean
	5	32	AFR 7 Heater Time-Out Error	Boolean
	6	64	AFR 7 Heater Short Error	Boolean
	7 (msb)	128	AFR 7 Overtemp Error	Boolean
	0 (lsb)	0	AFR 8 Ready	Boolean
	1	2	AFR 8 Heater Open Error	Boolean
	2	4	AFR 8 VM Error	Boolean
_	3	8	AFR 8 UN Error	Boolean
3	4	16	AFR 8 IP Error	Boolean
	5	32	AFR 8 Heater Time-Out Error	Boolean
	6	64	AFR 8 Heater Short Error	Boolean
	7 (msb)	128	AFR 8 Overtemp Error	Boolean
	0 (lsb)	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 (lsb)	0	Reserved	Boolean
	1	2	Reserved	Boolean
	2	4	Reserved	Boolean
_	3	8	Reserved	Boolean
5	4	16	Sensor 8 Heating up	Boolean
	5	32	Sensor 7 Heating up	Boolean
	6	64	Sensor 6 Heating up	Boolean
	7 (msb)	128	Sensor 5 Heating up	Boolean
	,,			
6-7			Exhaust Pressure 2	16 bit unsigned

0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true		0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0.00689476 kPag/bit	0	0 to 4,518.48 kPag

<==	<==	<==
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<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
.001 psig/bit	0	0 to 655.35 psig

Message ID: 0x000001B1

Sources: AEM 4 Channel UEGO (P/N 30-2340) set on MODE 3

30-2340N is the same except 11 bit messages headers and at 1 mBit/sec bus speed  $\,$ 

40ms continuous (25hz)

SI Units ( C / kPa / kph / Lambda )

US Units ( F / PSI / MPH / AFR )

Byte	Bit	Bitmask	Label	Data Type	Scaling	Offset	Range	Scaling	Offset	Range
	0 (lsb)	0	AFR 1 Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	AFR 1 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	AFR 1 VM Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
0	3	8	AFR 1 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
0	4	16	AFR 1 IP Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	AFR 1 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	AFR 1 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	AFR 1 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	0 (lsb)	0	AFR 3 Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	AFR 3 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	AFR 3 VM Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
1	3	8	AFR 3 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
1	4	16	AFR 3 IP Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	AFR 3 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	AFR 3 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	AFR 3 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	0 (lsb)	0	AFR 5 Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	AFR 5 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	AFR 5 VM Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
2	3	8	AFR 5 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
2	4	16	AFR 5 IP Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	AFR 5 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	AFR 5 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	AFR 5 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	0 (lsb)	0	AFR 7 Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	AFR 7 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	AFR 7 VM Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
3	3	8	AFR 7 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
3	4	16	AFR 7 IP Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	AFR 7 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	AFR 7 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	AFR 7 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	0 (lsb)	0	UEGO Low Voltage Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	EBP sensor ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	EBP sensor Error Low Volt	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
4	3	8	EBP sensor detected	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==

	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 (lsb)	0	Reserved	Boolean
	1	2	Reserved	Boolean
	2	4	Reserved	Boolean
5	3	8	Reserved	Boolean
5	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
6-7			Exhaust Pressure 1	16 bit unsigned

Lahel

AFR 2 Ready

AFR 2 Heater Open Error

AFR 2 VM Error

AFR 2 IP Error

AFR 2 Heater Time-Out Error

AFR 2 Heater Short Error

AFR 2 Overtemp Error

AFR 4 Ready

AFR 4 Heater Open Erro

AFR 4 VM Error

AFR 4 UN Frror

AFR 4 IP Error

AFR 4 Heater Time-Out Error

AFR 4 Heater Short Error

AFR 4 Overtemp Error

AFR 6 Ready

AFR 6 Heater Open Error

AFR 6 VM Error

AFR 6 UN Error

AFR 6 IP Error

AFR 6 Heater Time-Out Erro

AFR 6 Heater Short Error

AFR 6 Overtemp Error

AFR 8 Ready

AFR 8 Heater Open Error

AFR 8 VM Error

AFR 8 UN Error

AFR 8 IP Error

AFR 8 Heater Time-Out Error

AFR 8 Heater Short Error

AFR 8 Overtemp Error

UEGO Low Voltage Error

EBP sensor ready

EBP sensor Error Low Volt

EBP sensor detected

CAN Config Mode

CAN Config Mode

CAN Config Mode

Sensor 8 Heating up

Sensor 6 Heating up

Sensor 4 Heating up

Sensor 2 Heating up

Exhaust Pressure 2

Bit

0

16

32

64

128

0

16

64

128

16

32

64

128

32

64

128

16

32

64

128

16

32

64

128

0 (lsb)

2

7 (msb)

0 (lsb)

7 (msb)

0 (lsb)

6

7 (msb)

0 (lsb)

7 (msb)

0 (lsb)

6

0 (lsb)

7 (msb)

6-7

3

0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0.00689476 kPag/bit	0	0 to 4,518.48 kPag

<==	<==	<==
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<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
.001 psig/bit	0	0 to 655.35 psig

Message ID: 0x000001B2

Sources: AEM 4 Channel UEGO (P/N 30-2340) set on MODE 4

30-2340N is the same except 11 bit messages headers and at 1 mBit/sec bus speed

40ms continuous (25hz)

Data Type Boolean Roolean Boolean Boolean

Boolean

Boolean Boolean

Boolean

Boolean

Boolean

Boolean Boolean

Boolean

Boolean

Boolean

16 bit unsigned

SI Units ( C / kPa / kph / Lambda )							
Scaling	Offset	Range					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0 = false, 1 = true	0	0/1					
0.00689476 kPag/bit	0	0 to 4,518.48 kPag					

US Units	(F/PSI/N	IPH / AFR )
Scaling	Offset	Range
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
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<==	<==	<==
.001 psig/bit	0	0 to 655.35 psig

Message ID: 0x000001B3

40ms continuous (25hz)

Sources: AEM 4 Channel UEGO (P/N 30-2340) set on MODE 5

30-2340N is the same except 11 bit messages headers and at 1 mBit/sec bus speed

Byte Bit Bitmask Label Data Type 0 (lsb) 0 AFR 9 Ready Boolean AFR 9 Heater Open Error Boolean AFR 9 VM Error Boolean AFR 9 UN Error Boolean 0 16 AFR 9 IP Error Boolean 32 AFR 9 Heater Time-Out Error Boolean 64 AFR 9 Heater Short Error Boolean 7 (msb) 128 AFR 9 Overtemp Error Boolean 0 (lsb) Boolean AFR 10 Ready AFR 10 Heater Open Error Boolean AFR 10 VM Error Boolean AFR 10 UN Error 8 Boolean 16 AFR 10 IP Error Boolean

AFR 10 Heater Time-Out Error

SI Units ( C / kPa / kph / Lambda )					
Scaling	Offset	Range			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			
0 = false, 1 = true	0	0/1			

Scaling	Offset	Range
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==

LIC LI=:+= / F / DCL / MADLL / MED.)

	6	64	AFR 10 Heater Short Error	Boolean
	7 (msb)	128	AFR 10 Overtemp Error	Boolean
	0 (lsb)	0	AFR 11 Ready	Boolean
	1	2	AFR 11 Heater Open Error	Boolean
	2	4	AFR 11 VM Error	Boolean
2	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 (lsb)	0	AFR 12 Ready	Boolean
	1	2	AFR 12 Heater Open Error	Boolean
	2	4	AFR 12 VM Error	Boolean
3	3	8	AFR 12 UN Error	Boolean
3	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 (lsb)	0	UEGO Low Voltage Error	Boolean
	1	2	EBP sensor ready	Boolean
	2	4	EBP sensor Error Low Volt	Boolean
4	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 (lsb)	0		Boolean
	1	2		Boolean
	2	4		Boolean
5	3	8		Boolean
э	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
6-7			Exhaust Pressure 2	16 bit unsigned

0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0.00689476 kPag/bit	0	0 to 4,518.48 kPag

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<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
.001 psig/bit	0	0 to 655.35 psig

Message ID: 0x000001B4

Sources: AEM 4 Channel UEGO (P/N 30-2340) set on MODE 6

30-2340N is the same except 11 bit messages headers and at 1 mBit/sec bus speed

40ms continuous (25hz)

SI Units ( C / kPa / kph / Lambda )

US Units ( F / PSI / MPH / AFR )

				Jittiilaoas (ESIIE)	31 Offits ( C / KFa / Kpii / Lailibua )			OS OIIILS (F/FSI/IMFII/AFR)		
Byte	Bit	Bitmask	Label	Data Type	Scaling	Offset	Range	Scaling	Offset	Range
	0 (lsb)	0	AFR 1 Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	AFR 1 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	AFR 1 VM Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
0	3	8	AFR 1 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
U	4	16	AFR 1 IP Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	AFR 1 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	AFR 1 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	AFR 1 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	0 (lsb)	0	AFR 2 Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	AFR 2 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	AFR 2 VM Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
1	3	8	AFR 2 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
1	4	16	AFR 2 IP Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	AFR 2 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	AFR 2 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	AFR 2 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	0 (lsb)	0	AFR 3 Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	AFR 3 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	AFR 3 VM Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
2	3	8	AFR 3 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	4	16	AFR 3 IP Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	AFR 3 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	AFR 3 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	AFR 3 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
3				Boolean						
	0 (lsb)	0	UEGO Low Voltage Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	EBP sensor ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	EBP sensor Error Low Volt	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
4	3	8	EBP sensor detected	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
4	4	16	CAN Config Mode	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	CAN Config Mode	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	CAN Config Mode	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	CAN Config Mode	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	0 (lsb)	0		Boolean						
	1	2		Boolean						
	2	4		Boolean						
5	3	8		Boolean						
3	4	16		Boolean						
	5	32	Sensor 3 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	Sensor 2 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	Sensor 1 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
6-7			Exhaust Pressure 1	16 bit unsigned	0.00689476 kPag/bit	0	0 to 4,518.48 kPag	.001 psig/bit	0	0 to 655.35 psig

Message ID: 0x000001B5

Sources: AEM 4 Channel UEGO (P/N 30-2340) set on MODE 7

30-2340N is the same except 11 bit messages headers and at 1 mBit/sec bus speed

40ms continuous (25hz) SI Units ( C / kPa / kph / Lambda ) US Units ( F / PSI / MPH / AFR )

Byte	Bit	Bitmask	Label	Data Type
	0 (lsb)	0	AFR 4 Ready	Boolean
	1	2	AFR 4 Heater Open Error	Boolean
	2	4	AFR 4 VM Error	Boolean
0	3	8	AFR 4 UN Error	Boolean
U	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 (lsb)	0	AFR 5 Ready	Boolean
	1	2	AFR 5 Heater Open Error	Boolean
	2	4	AFR 5 VM Error	Boolean
1	3	8	AFR 5 UN Error	Boolean
1	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 (lsb)	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
2	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
3				Boolean
	0 (lsb)	0	UEGO Low Voltage Error	Boolean
	1	2	EBP sensor ready	Boolean
	2	4	EBP sensor Error Low Volt	Boolean
4	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 (lsb)	0		Boolean
	1	2		Boolean
	2	4		Boolean
5	3	8		Boolean
5	4	16		Boolean
	5	32	Sensor 6 Heating up	Boolean
	6	64	Sensor 5 Heating up	Boolean
	7 (msb)	128	Sensor 4 Heating up	Boolean
6-7			Exhaust Pressure 2	16 bit unsigned

Scaling	Offset	Range
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
0 = false, 1 = true	0	0/1
.001 psig/bit	0	0 to 655.35 psig

Scaling	Offset	Range
<==	<==	<==
<==	<==	<==
<==	<==	<==
<b>&lt;==</b>	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
<==	<==	<==
.001 psig/bit	0	0 to 655.35 psig