

## Appendix I: FDR Data Log Comparison

*Table 18: The G1000 and Avidyne Entegra systems record similar data parameters in their logs but sometimes differ in their parameter names or units used.*

Parameter	G1000 Parameter ID	G1000 Units	Avidyne Parameter ID	Avidyne Units
Time Stamp			timeStamp	
Local Date	Lcl Date	mm/dd/yyyy	mUtcDate	mm:dd:yyyy
Local Time	Lcl Time	hh:mm:ss	mUtcTime	hh:mm:ss
Timezone	UTCOfst	hh:mm		
Time in Service			minutesInService	minutes
Active Waypoint Identifier	AtvWpt	ident	mNxWptID	
Distance to Next Waypoint	WptDst	nm	DistanceToWpt	nm
Bearing to Next Waypoint	WptBrg	degrees	ActiveBearing	degrees
Estimated Time En Route			mEteInSeconds	seconds
Latitude	Latitude	degrees	mLatitude	degrees
Longitude	Longitude	degrees	mLongitude	degrees
Altitude	AltB	feet Baro	altitude; baroCorrectedAlt	feet
Altitude Valid			altitudeValid; baroCorrectedAltValid	
Altitude Bug			AltBug	feet
Barometer Setting	BaroA	inches	baroSetting	inHg
Barometer Setting Valid			baroSettingValid	
Barometer Bug			mBaroBug	inHg
MSL Altitude	AltMSL	feet MSL		
Density Altitude			densityAltitude	feet
Density Altitude Valid			densityAltitudeValid	
Outside Air Temperature	OAT	degrees C	totalTemperature	degrees C
Total Temperature Valid			totalTemperatureValid	
Indicated Airspeed	IAS	kt	indicatedAirspeed	kt

<b>Parameter</b>	<b>G1000 Parameter ID</b>	<b>G1000 Units</b>	<b>Avidyne Parameter ID</b>	<b>Avidyne Units</b>
Indicated Airspeed Bug			mIasBug	kt
Indicated Airspeed Valid			indicatedAirspeedValid	
Ground Speed	GndSpd	kt	mGroundSpeed	kt
Vertical Speed	VSpd	fpm	altitudeRate	fpm
Altitude Rate Valid			altitudeRateValid	
Vertical Speed Indicator Bug			mVsiBug	fpm
Pitch	Pitch	degrees	pitch	
Pitch Valid			pitchValid	
Pitch Rate			Pitch Rate	degrees/s
Pitch Rate Valid			Pitch Rate Valid	
Roll	Roll	degrees	roll	
Roll Valid			rollValid	
Roll Rate			Roll Rate	degrees/s
Roll Rate Valid			Roll Rate Valid	
Yaw Rate			Yaw rate	degrees/s
Yaw Rate Valid			Yaw Rate Valid	
Turn Rate			rateofTurn	
Turn Rate Valid			rateofTurnValid	
Lateral Acceleration	LatAc	G	lateralAcceleration; Lat Accel	m/s^2
Lateral Acceleration Valid			lateralAccelerationValid; Lat Accel Valid	
Vertical Acceleration	NormAc	G	Norm Accel	m/s^2
Vertical Acceleration Valid			Norm Accel Valid	
Longitudinal Acceleration			Long Accel	m/s^2
Longitudinal Acceleration Valid			Long Accel Valid	
Heading	HDG	degrees	magHeading	
Heading Bug			mHdgBug	degrees
Magnetic Heading Valid			magHeadingValid	
Track	TRK	degrees	mGroundTrack	degrees
Voltage 1	volt1; volt2	volts		

Parameter	G1000 Parameter ID	G1000 Units	Avidyne Parameter ID	Avidyne Units
Amperage 1	amp1; amp2	amps		
Fuel Flow	E1 FFlow	gph	fuelflowL; fuelflowR; fuelFlowL; fuelFlowR	gph; lbph
Oil Temperature	E1 OilT	degrees F	oilTempL / oilTempR	degrees F
Oil Pressure	E1 OilP	psi	oilPresL / oilPresR / oilPressL / oilPressR	psi
Manifold Absolute Pressure	E1 MAP	Hg	manPresL; manPresR	inHg
Engine Rotations per Minute	E1 RPM	rpm	tachL; tachR	rpm
Engine Percent Power			percentPowerL; percentPowerR	%
Engine Percent Torque			engineTorquePercentL; engineTorquePercentR	%
Turbine Rotations per Minute			engineNgPercentL; engineNgPercentR	%
Propeller Rotations per Minute			engineNpPercentL; engineNpPercentR	%
Inlet Turbine Temperature			ittDegCL; ittDegCR	
Cylinder Head Temperature	E1 CHT1; E1 CHT2; E1 CHT 3; E1 CHT4; E1 CHT5; E1 CHT6	degrees F		
Exhaust Gas Temperature	E1 EGT1; E1 EGT2; E1 EGT 3; E1 EGT4; E1 EGT5; E1 EGT6	degrees F		
Cool Temperature			coolTempL; coolTempR	degrees F
Altitude GPS	AltGPS	ft wgs		
True Airspeed	TAS	kt	trueAirspeed	kt
True Airspeed Valid			trueAirspeedValid	
Airspeed Trend			airspeedTrend	
Airspeed Trend Valid			airspeedTrendValid	
Course	HSIS	enum	ActiveCourse	degrees
Desired Course	CRS	degrees	mDtkOrBrg; DesiredCourse	degrees

Parameter	G1000 Parameter ID	G1000 Units	Avidyne Parameter ID	Avidyne Units
Navigational Frequency	NAV1; NAV2	MHz	VhfFreq	
Primary Navigation Source			ucPriNavSource	
Communication Frequency	COM1; COM2	MHZ		
Horizontal Course Deviation Indicator	HCDI	fsd	HdiDeviation	%
Horizontal Course Deviation Indicator Source			HdiSource	
Vertical Course Deviation Indicator	VCDI	fsd	VdiDeviation	%
Vertical Course Deviation Indicator Source			VdiSource	
Wind Speed	WndSpd	kt		
Wind Direction	WndDr	degrees		
Magnetic Variation	MagVar	degrees		
Automatic Flight Control System On	AfcsOn	bool		
*	RollM	enum		
*	PitchM	enum		
Roll	RollC	degrees	fdRoll	
Pitch	PitchC	degrees	fdPitch	
GPS Vertical Speed	VSpdG	fpm		
GPS Fix	GPSfix	enum	GpsHold	
Horizontal Alert Limit	HAL	mt	HdiDeviationLimit	
Vertical Alert Limit	VAL	mt	VdiDeviationLimit	
*	HPLwas	mt		
*	HPLfd	mt		
*	VPLwas	mt		
Active Annunciators			apAnnunciators	
Logic States			logicStates	
Map Format			mMapFormat	enum
Map Range			mMapRangeIndex	
Flags			Flags; FlagsL; FlagsR; WaasFlags	

<b>Parameter</b>	<b>G1000 Parameter ID</b>	<b>G1000 Units</b>	<b>Avidyne Parameter ID</b>	<b>Avidyne Units</b>
Saturated			saturated	
Saturated Valid			saturatedValid	
Go/No-go			GoNogo; mpuNoGo; iruNoGo; magNoGo	
Needle Text Type			mNeedleTextType	enum
Dh Alert			mDhAlert	
Synthetic Rate Alarm			SyntheticRateAlarm	
Longterm Bias Drift Alarm			LongtermBiasDriftAlar m	
Bias Cutout Alarm			BiasCutoutAlarm	