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	Scaling	Offset	Range	Scaling	Offset	Range
0-1			Engine Speed	16 bit unsigned	0.39063 rpm/bit	0	0 to 25,599.94 RPM	<==	<==	<==
2-3			Engine Load (Deprecated 2014) Use "MAP" in 0x01F0A004 Instead	16 bit unsigned	0.00261230481157781	0	0 to 99.998 %	<==	<==	<==
4-5			Throttle	16 bit unsigned	0.0015259 %/bit	0	0 to 99.998 %	<==	<==	<==
6			Intake Air Temp	8 bit signed, 2's comp	1 Deg C/bit	0	-128 to 127 C	1.8 Deg F/bit	32	-198.4 to 260.6 F
7			Coolant Temp	8 bit signed, 2's comp	1 Deg C/bit	0	-128 to 127 C	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	Scaling	Offset	Range	Scaling	Offset	Range
0-1			ADCR11	16 bit unsigned	0.00007782 V/bit	0	0 to 5.0999 V	<==	<==	<==
2-3			ADCR13	16 bit unsigned	0.00007782 V/bit	0	0 to 5.0999 V	<==	<==	<==
4-5			ADCR14	16 bit unsigned	0.00007782 V/bit	0	0 to 5.0999 V	<==	<==	<==
6-7			ADCR17	16 bit unsigned	0.00007782 V/bit	0	0 to 5.0999 V	<==	<==	<==

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	Scaling	Offset	Range	Scaling	Offset	Range
0-1			ADCR18	16 bit unsigned	0.00007782 V/bit	0	0 to 5.0999 V	<==	<==	<==
2-3			ADCR15	16 bit unsigned	0.00007782 V/bit	0	0 to 5.0999 V	<==	<==	<==
4-5			ADCR16	16 bit unsigned	0.00007782 V/bit	0	0 to 5.0999 V	<==	<==	<==
6-7			ADCR08	16 bit unsigned	0.000326 V/bit	0	0 to 21.3644 V	<==	<==	<==

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)		
Byte	Bit	Bitmask	Label	Data Type	Scaling	Offset	Range	Scaling	Offset	Range
0			Lambda #1	8 bit unsigned	0.00390625 Lambda/bit	0.5	0.5 to 1.496 Lambda	0.057227 AFR/bit	7.325	7.325 to 21.916 AFR
1			Lambda #2	8 bit unsigned	0.00390625 Lambda/bit	0.5	0.5 to 1.496 Lambda	0.057227 AFR/bit	7.325	7.325 to 21.916 AFR
2-3			Vehicle Speed	16 bit unsigned	0.0062865 kph/bit	0	0 to 411.986 km/h	0.00390625 mph/bit	0	0 to 255.996 MPH
4			Gear Calculated	8 bit unsigned	1	0	0 to 255	<==	<==	<==
5			Ign Timing	8 bit unsigned	.35156 Deg/bit	-17	-17 to 72.65 Deg	<==	<==	<==
6-7			Battery Volts	16 bit unsigned	0.0002455 V/bit	0	0 to 16.089 Volts	<==	<==	<==

Message ID: 0x01F0A004
Sources: Infinity EMS (30-71XX) V96.1 and Later
20ms continuous (50hz)

					SI Units (C / kPa / kph / Lambda)			US Units (F / PSI / MPH / AFR)		
Byte	Bit	Bitmask	Label	Data Type	Scaling	Offset	Range	Scaling	Offset	Range
0-1			MAP	16 bit unsigned	0.1 kPa/bit	0	0 to 6,553.5 kPa	0.014504 PSI/bit	-14.6960	-14.696 to 935.81 PSIg
2			VE	8 bit unsigned	1 %/bit	0	0 to 255 %	<==	<==	<==
3			FuelPressure	8 bit unsigned	0.580151 PSIg/bit	0	0 to 147.939 PSIg	<==	<==	<==
4			OilPressure	8 bit unsigned	0.580151 PSIg/bit	0	0 to 147.939 PSIg	<==	<==	<==
5			LambdaTarget	8 bit unsigned	0.00390625 Lambda/bit	0.5	0.5 to 1.496 Lambda	0.057227 AFR/bit	7.325	7.325 to 21.916 AFR
6	0 (lsb)	0	FuelPump	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	Fan 1	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	Fan 2	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	3	8	N2O Active	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	4	16	O2FB Active	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	EngineProtectOut	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	MILOutput	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==

	7 (msb)	128	Lean Protect	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
7	0 (lsb)	0	Oil Press Protect	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	2 Step Fuel	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	2 Step Spark	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	3	8	Sync State	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	4	16	A/C On	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	BoostCut	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	----	Boolean	----	----	----	----	----	----
	7 (msb)	128	----	Boolean	----	----	----	----	----	----

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 / AFR)		
Byte	**Bit**	**Bitmask**	**Label**	**Data Type**	**Scaling**	**Offset**	**Range**	**Scaling**	**Offset**	**Range**
0-1			LaunchRampTime [ms]	16 bit unsigned	10 mS/bit	0	0 to 655,350 mS	<==	<==	<==
2-3			MassAirflow [gms/s]	16 bit unsigned	.05 [gms/s] / bit	0	0 to 3,276.75 gms/s	.00661387 [lb/min]/bit	0	0 to 433.440 lb/min
4-5			MassAirflow [gms/rev]	16 bit unsigned	.0005 [gms/rev] / bit	0	0 to 32.7675 gms/rev	.0000661387 [lb/rev]/bit	0	0 to 4.3344 lb/rev
6			Clutch Pressure	8 bit unsigned	5 PSIg/bit	0	0 to 1275 PSIg	<==	<==	<==
7	0 (lsb)	0	Brake Sw	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	Clutch Sw	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	Shift Sw	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	3	8	Staged Sw	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	4	16	----	Boolean	----	----	----	----	----	----
	5	32	----	Boolean	----	----	----	----	----	----
	6	64	----	Boolean	----	----	----	----	----	----
	7 (msb)	128	----	Boolean	----	----	----	----	----	----

Message ID: 0x01F0A006

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

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			Inj1Pulse	8 bit unsigned	0.1 mS/bit	0	0 to 25.5 mS	<==	<==	<==
1			Inj1LambdaFB	8 bit unsigned	0.5 %/bit	-64.00	-64 to 63.5 %	<==	<==	<==
2			PrimaryInjDuty [%]	8 bit unsigned	0.392157 %/bit	0	0 to 100 %	<==	<==	<==
3			Mode Sw	8 bit unsigned	1 /bit	0	0 - 255	<==	<==	<==
4			Water Pressure	8 bit unsigned	0.580151 PSIg/bit	0	0 to 147.939 PSIg	<==	<==	<==
5			Crankcase Pressure	8 bit unsigned	1 kPa/bit	0	0 to 255 kPa	0.14504 PSI/bit	-14.696	-14.696 to 22.289 PSIg
6-7			Est Torque	16 bit unsigned	0.1 Nm/bit	-3276.8	-3276.8 to 3276.7	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)		
Byte	**Bit**	**Bitmask**	**Label**	**Data Type**	**Scaling**	**Offset**	**Range**	**Scaling**	**Offset**	**Range**
0			InjectorProbability [%]	8 bit unsigned	0.392157 %/bit	0	0 to 100 %	<==	<==	<==
1			SparkProbability [%]	8 bit unsigned	0.392157 %/bit	0	0 to 100 %	<==	<==	<==
2			LambdaTrim_Knock	8 bit unsigned	0.001 Lambda/bit	0	0 to 0.255 Lambda	0.01465 AFR/bit	0	0 to 3.73575 AFR
3			Baro Press	8 bit unsigned	0.25 kPa/bit	50	50 to 113.75 kPa	0.073825 inHg/bit	14.76	14.76 to 33.5903 inHg
4			FlexContent	8 bit unsigned	0.392157 %/bit	0	0 to 100 %	<==	<==	<==
5			Airbox Temp	8 bit unsigned	1 Deg C/bit	-50.00	-50 to 205 C	1.8 Deg F/bit	-58	-58 to 401 F
6			Oil Temp	8 bit unsigned	1 Deg C/bit	-50.00	-50 to 205 C	1.8 Deg F/bit	-58	-58 to 401 F
7	0 (lsb)	0	LaunchTimerArmed	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	Logging Active	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	ModeSelect_Ign	2 bit unsigned	####00## = Mode 1, ####01## = Mode 2 ####10## = Mode 3, ####11## = Mode 4			<==	<==	<==
	3	8								
	4	16	ModeSelect_Lambda	2 bit unsigned	##00#### = Mode 1, ##01#### = Mode 2 ##10#### = Mode 3, ##11#### = Mode 4			<==	<==	<==
	5	32								
	6	64	ModeSelect_DBW	1 bit unsigned	#0###### = Mode 1, #1###### = Mode 2			<==	<==	<==
	7 (msb)	128	VTEC	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==

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)		
Byte	**Bit**	**Bitmask**	**Label**	**Data Type**	**Scaling**	**Offset**	**Range**	**Scaling**	**Offset**	**Range**
0			Trans Temp	8 bit unsigned	1 Deg C/bit	-50.00	-50 to 205 C	1.8 Deg F/bit	-58	-58 to 401 F
1-2			SparkCut [RPM]	16 bit unsigned	0.39063 rpm/bit	0	0 to 25,599.94 RPM	<==	<==	<==
3-4			FuelCut [RPM]	16 bit unsigned	0.39063 rpm/bit	0	0 to 25,599.94 RPM	<==	<==	<==
5			2StepTargetFuel [RPM]	8 bit unsigned	100 rpm/bit	0	0 to 25,500 RPM	<==	<==	<==
6			2StepTargetSpark [RPM]	8 bit unsigned	100 rpm/bit	0	0 to 25,500 RPM	<==	<==	<==
7	0 (lsb)	0	ErrorThrottle	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	ErrorCoolantTemp	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	ErrorFuelPressure	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	3	8	ErrorOilPressure	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	4	16	ErrorEBP	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	ErrorMAP	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	ErrorAirTemp	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	ErrorBaro	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==

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	Scaling	Offset	Range	Scaling	Offset	Range
0			VVC1A_Cam_Timing	8 bit unsigned	0.5 deg/bit	-50	-50 to 77.5 deg	<==	<==	<==
1			VVC2A_Cam_Timing	8 bit unsigned	0.5 deg/bit	-50	-50 to 77.5 deg	<==	<==	<==
2			VVC1B_Cam_Timing	8 bit unsigned	0.5 deg/bit	-50	-50 to 77.5 deg	<==	<==	<==
3			VVC2B_Cam_Timing	8 bit unsigned	0.5 deg/bit	-50	-50 to 77.5 deg	<==	<==	<==
4			VVC1 Target [deg]	8 bit unsigned	0.5 deg/bit	-50	-50 to 77.5 deg	<==	<==	<==
5			VVC2 Target [deg]	8 bit unsigned	0.5 deg/bit	-50	-50 to 77.5 deg	<==	<==	<==
6			----	----	----	----	----	----	----	----
7			----	----	----	----	----	----	----	----

Message ID: 0x01F0A00B

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

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
0-1			BoostTarget	16 bit unsigned	0.1 kPa/bit	0	0 to 6,553.5 kPa	0.014504 PSI/bit	-14.6960	-14.696 to 935.81 PSIg
2-3			ChargeOutPress	16 bit unsigned	0.1 kPa/bit	0	0 to 6,553.5 kPa	0.014504 PSI/bit	-14.6960	-14.696 to 935.81 PSIg
4			BoostControl [%]	8 bit unsigned	0.392157 %/bit	0	0 to 100 %	<==	<==	<==
5			BoostFB_PID [%]	8 bit unsigned	0.392157 %/bit	0	0 to 100 %	<==	<==	<==
6			ChargeOutTemp	8 bit unsigned	1 Deg C/bit	-50.00	-50 to 205 C	1.8 Deg F/bit	-58	-58 to 401 F
7			TurboSpeed [RPM]	8 bit unsigned	500 rpm/bit	0	0 to 127,500 RPM	<==	<==	<==

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

Byte	Bit	Bitmask	Label	Data Type	Scaling	Offset	Range	Scaling	Offset	Range
0			DBW_APP1	8 bit unsigned	0.392157 %/bit	0	0 to 100 %	<==	<==	<==
1			DBW_Target	8 bit unsigned	0.392157 %/bit	0	0 to 100 %	<==	<==	<==
2			DBW1_TPSA	8 bit unsigned	0.392157 %/bit	0	0 to 100 %	<==	<==	<==
3			DBW2_TPSA	8 bit unsigned	0.392157 %/bit	0	0 to 100 %	<==	<==	<==
4			----	----	----	----	----	----	----	----
5	0 (lsb)	0	DBW_Error_APP_Corr	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	DBW_Error_APP1_Range	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	DBW_Error_APP2_Range	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	3	8	DBW_Error_BTO	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	4	16	----	Boolean	----	----	----	----	----	----
	5	32	----	Boolean	----	----	----	----	----	----
	6	64	----	Boolean	----	----	----	----	----	----
	7 (msb)	128	----	Boolean	----	----	----	----	----	----
6	0 (lsb)	0	DBW1_Error_Fatal	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	DBW1_Error_TPSA_Range	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	DBW1_Error_TPSB_Range	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	3	8	DBW1_Error_Tracking	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	4	16	DBW1_Error_Current	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	DBW1_Error_TPS_Corr	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	----	Boolean	----	----	----	----	----	----
	7 (msb)	128	----	Boolean	----	----	----	----	----	----
7	0 (lsb)	0	DBW2_Error_Fatal	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	DBW2_Error_TPSA_Range	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	DBW2_Error_TPSB_Range	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	3	8	DBW2_Error_Tracking	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	4	16	DBW2_Error_Current	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	DBW2_Error_TPS_Corr	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	----	Boolean	----	----	----	----	----	----
	7 (msb)	128	----	Boolean	----	----	----	----	----	----

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

Byte	Bit	Bitmask	Label	Data Type	Scaling	Offset	Range	Scaling	Offset	Range
0			TC_FuelCut [%]	8 bit unsigned	0.392157 %/bit	0	0 to 100 %	<==	<==	<==
1			TC_SparkCut [%]	8 bit unsigned	0.392157 %/bit	0	0 to 100 %	<==	<==	<==
2			TC_Retard [degBTDC]	8 bit unsigned	0.25 deg/bit	0	0 to 63.75 deg	<==	<==	<==
3			TC_TqReduceDBW [%]	8 bit unsigned	0.392157 %/bit	0	0 to 100 %	<==	<==	<==
4			TC_ Mode_Sw	8 bit unsigned	1 /bit	0	0 - 255	<==	<==	<==
5			3StepTargetFuel [RPM]	8 bit unsigned	100 rpm/bit	0	0 to 25,500 RPM	<==	<==	<==
6			3StepTargetSpark [RPM]	8 bit unsigned	100 rpm/bit	0	0 to 25,500 RPM	<==	<==	<==
7	0 (lsb)	0	3 Step Fuel	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	3 Step Spark	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	3 Step Sw	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	3	8	----	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	4	16	----	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	----	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	----	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	----	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==

Message ID: 0x01F0A011

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

20ms continuous (50hz)

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

Byte	Bit	Bitmask	Label	Data Type	Scaling	Offset	Range	Scaling	Offset	Range
0-1			DLWheelSpeed	16 bit unsigned	0.02 kph/bit	0	0 to 1310.7 km/h	0.0124274 mph/bit	0	0 to 814.431 MPH
2-3			DRWheelSpeed	16 bit unsigned	0.02 kph/bit	0	0 to 1310.7 km/h	0.0124274 mph/bit	0	0 to 814.431 MPH
4-5			NLWheelSpeed	16 bit unsigned	0.02 kph/bit	0	0 to 1310.7 km/h	0.0124274 mph/bit	0	0 to 814.431 MPH

6-7			NRWheelSpeed	16 bit unsigned	0.02 kph/bit	0	0 to 1310.7 km/h	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 continuous (50hz)

					SI Units (C / kPa / kph / Lambda)			US Units (F / PSI / MPH / AFR)		
Byte	**Bit**	**Bitmask**	**Label**	**Data Type**	**Scaling**	**Offset**	**Range**	**Scaling**	**Offset**	**Range**
0-1			TC_SlipTarget	16 bit unsigned	0.02 kph/bit	0	0 to 1310.7 km/h	0.0124274 mph/bit	0	0 to 814.431 MPH
2-3			TC_SlipMeasured	16 bit unsigned	0.02 kph/bit	0	0 to 1310.7 km/h	0.0124274 mph/bit	0	0 to 814.431 MPH
4-5			TC_TqReduceReq	16 bit unsigned	0.25/bit	0	0 to 16,383.75	<==	<==	<==
6			----	----	----	----	----	----	----	----
7			----	----	----	----	----	----	----	----

Message ID: 0x01F0A020

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

20ms continuous (50hz)

					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			KnockFB_Cyl1	8 bit unsigned	- 0.1 degree/bit	0	0 to -25.5 deg	<==	<==	<==
1			KnockFB_Cyl2	8 bit unsigned	- 0.1 degree/bit	0	0 to -25.5 deg	<==	<==	<==
2			KnockFB_Cyl3	8 bit unsigned	- 0.1 degree/bit	0	0 to -25.5 deg	<==	<==	<==
3			KnockFB_Cyl4	8 bit unsigned	- 0.1 degree/bit	0	0 to -25.5 deg	<==	<==	<==
4			KnockFB_Cyl5	8 bit unsigned	- 0.1 degree/bit	0	0 to -25.5 deg	<==	<==	<==
5			KnockFB_Cyl6	8 bit unsigned	- 0.1 degree/bit	0	0 to -25.5 deg	<==	<==	<==
6			KnockFB_Cyl7	8 bit unsigned	- 0.1 degree/bit	0	0 to -25.5 deg	<==	<==	<==
7			KnockFB_Cyl8	8 bit unsigned	- 0.1 degree/bit	0	0 to -25.5 deg	<==	<==	<==

Message ID: 0x01F0A021

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

20ms continuous (50hz)

					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			KnockFB_Cyl9	8 bit unsigned	- 0.1 degree/bit	0	0 to -25.5 deg	<==	<==	<==
1			KnockFB_Cyl10	8 bit unsigned	- 0.1 degree/bit	0	0 to -25.5 deg	<==	<==	<==
2			----	----	----	----	----	----	----	----
3			----	----	----	----	----	----	----	----
4			----	----	----	----	----	----	----	----
5			----	----	----	----	----	----	----	----
6			----	----	----	----	----	----	----	----
7			----	----	----	----	----	----	----	----

Message ID: 0x0000001F

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

10ms continuous (100hz)

					SI Units (C / kPa / kph / Lambda)			US Units (F / PSI / MPH / AFR)		
Byte	**Bit**	**Bitmask**	**Label**	**Data Type**	**Scaling**	**Offset**	**Range**	**Scaling**	**Offset**	**Range**
0-1			Lambda 1	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
2-3			Lambda 2	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
4-5			Lambda 3	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
6-7			Lambda 4	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.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 Units (C / kPa / kph / Lambda)			US Units (F / PSI / MPH / AFR)		
Byte	**Bit**	**Bitmask**	**Label**	**Data Type**	**Scaling**	**Offset**	**Range**	**Scaling**	**Offset**	**Range**
0-1			Lambda 5	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
2-3			Lambda 6	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
4-5			Lambda 7	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
6-7			Lambda 8	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 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)

					SI Units (C / kPa / kph / Lambda)			US Units (F / PSI / MPH / AFR)		
Byte	**Bit**	**Bitmask**	**Label**	**Data Type**	**Scaling**	**Offset**	**Range**	**Scaling**	**Offset**	**Range**
0-1			Lambda 1	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
2-3			Lambda 3	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
4-5			Lambda 5	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
6-7			Lambda 7	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR

Message ID: 0x00000022

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

10ms continuous (100hz)

					SI Units (C / kPa / kph / Lambda)			US Units (F / PSI / MPH / AFR)		
Byte	Bit	Bitmask	Label	Data Type	Scaling	Offset	Range	Scaling	Offset	Range
0-1			Lambda 2	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
2-3			Lambda 4	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
4-5			Lambda 6	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
6-7			Lambda 8	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.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

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

10ms continuous (100hz)

					SI Units (C / kPa / kph / Lambda)			US Units (F / PSI / MPH / AFR)		
Byte	Bit	Bitmask	Label	Data Type	Scaling	Offset	Range	Scaling	Offset	Range
0-1			Lambda 9	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
2-3			Lambda 10	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
4-5			Lambda 11	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
6-7			Lambda 12	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.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)

					SI Units (C / kPa / kph / Lambda)			US Units (F / PSI / MPH / AFR)		
Byte	Bit	Bitmask	Label	Data Type	Scaling	Offset	Range	Scaling	Offset	Range
0-1			Lambda 1	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
2-3			Lambda 2	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
4-5			Lambda 3	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
6			---	---	---	---	---	----	----	----
7			---	---	---	---	---	----	----	----

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

10ms continuous (100hz)

					SI Units (C / kPa / kph / Lambda)			US Units (F / PSI / MPH / AFR)		
Byte	Bit	Bitmask	Label	Data Type	Scaling	Offset	Range	Scaling	Offset	Range
0-1			Lambda 4	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
2-3			Lambda 5	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
4-5			Lambda 6	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
6			---	---	---	---	---	----	----	----
7			---	---	---	---	---	----	----	----

Message ID: 0x00000026

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

10ms continuous (100hz)

					SI Units (C / kPa / kph / Lambda)			US Units (F / PSI / MPH / AFR)		
Byte	Bit	Bitmask	Label	Data Type	Scaling	Offset	Range	Scaling	Offset	Range
0-1			Lambda	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
2-3			Pressure	16 bit unsigned	0.00689476 kPa/bit	-2.09636	-2.09636 to 449.752 kPa	.001 PSI/bit	-15	-15 to 50.535 PSI
4-5			RPM	16 bit unsigned	.39063 RPM/bit	0	0 to 25,600 RPM	<==	<==	<==
6	0 (lsb)	0	AFR Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	AFR Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	AFR CJ125 Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	3	8	AFR Sensor Heating Up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	4	16	AFR Low Voltage	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	AFR Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	AFR Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	AFR Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
7	0 (lsb)	0	Alarm Status	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	Alarm Source	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	Alarm Source	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	3	8	Alarm Source	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	4	16	---	Boolean	---	---	---	----	----	----
	5	32	---	Boolean	---	---	---	----	----	----
	6	64	---	Boolean	---	---	---	----	----	----
	7 (msb)	128	---	Boolean	---	---	---	----	----	----

Message ID: 0x00000027

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

10ms continuous (100hz)

					SI Units (C / kPa / kph / Lambda)			US Units (F / PSI / MPH / AFR)		
Byte	**Bit**	**Bitmask**	**Label**	**Data Type**	**Scaling**	**Offset**	**Range**	**Scaling**	**Offset**	**Range**
0-1			Lambda Upper Limit	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
2-3			Lambda Lower Limit	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
4-5			Alarm Delay Limit	16 bit unsigned	1 mS/bit	0	0 to 65,535 mS	<==	<==	<==
6-7			Alarm Delay Counter	16 bit unsigned	1 mS/bit	0	0 to 65,535 mS	<==	<==	<==

Message ID: 0x00000028

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

10ms (100hz) only in alarm mode

					SI Units (C / kPa / kph / Lambda)			US Units (F / PSI / MPH / AFR)		
Byte	**Bit**	**Bitmask**	**Label**	**Data Type**	**Scaling**	**Offset**	**Range**	**Scaling**	**Offset**	**Range**
0-1			Alarm Lambda	16 bit unsigned	.0001 Lambda/bit	0	0 to 6.5535 Lambda	.001465 AFR/bit	0	0 to 96.0088 AFR
2-3			Alarm Pressure	16 bit unsigned	0.00689476 kPa/bit	-2.09636	-2.09636 to 449.752 kPa	.001 PSI/bit	-15	-15 to 50.535 PSI
4-5			Alarm Reset Limit	16 bit unsigned	1 mS/bit	0	0 to 65,535 mS	<==	<==	<==
6-7			Alarm Reset Counter	16 bit unsigned	1 mS/bit	0	0 to 65,535 mS	<==	<==	<==

Message ID: 0x000001AF

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

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	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	<==	<==	<==
	3	8	AFR 1 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	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	<==	<==	<==
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	<==	<==	<==
	3	8	AFR 2 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	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	<==	<==	<==
2	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	<==	<==	<==
	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	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	<==	<==	<==
	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	<==	<==	<==
4	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	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	<==	<==	<==
5	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	<==	<==	<==
	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	<==	<==	<==
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 (C / kPa / kph / Lambda)			US Units (F / PSI / MPH / AFR)		
Byte	**Bit**	**Bitmask**	**Label**	**Data Type**	**Scaling**	**Offset**	**Range**	**Scaling**	**Offset**	**Range**

0	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	<==	<==	<==
	3	8	AFR 5 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	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	<==	<==	<==
1	0 (lsb)	0	AFR 6 Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	AFR 6 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	AFR 6 VM Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	3	8	AFR 6 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	4	16	AFR 6 IP Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	AFR 6 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	AFR 6 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	AFR 6 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
2	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	8	AFR 7 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	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	<==	<==	<==
3	0 (lsb)	0	AFR 8 Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	AFR 8 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	AFR 8 VM Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	3	8	AFR 8 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	4	16	AFR 8 IP Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	AFR 8 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	AFR 8 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	AFR 8 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
4	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	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	<==	<==	<==
5	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	<==	<==	<==
	4	16	Sensor 8 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	Sensor 7 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	Sensor 6 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	Sensor 5 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
6-7			Exhaust Pressure 2	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: 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	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	<==	<==	<==
	3	8	AFR 1 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	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	<==	<==	<==
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	<==	<==	<==
	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	<==	<==	<==
2	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	<==	<==	<==
	3	8	AFR 5 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	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	<==	<==	<==
3	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	8	AFR 7 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	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	<==	<==	<==
4	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	<==	<==	<==
5	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	<==	<==	<==
	4	16	Sensor 7 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	Sensor 5 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	Sensor 3 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: 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)

					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	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	<==	<==	<==
	3	8	AFR 2 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	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	<==	<==	<==
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	<==	<==	<==
	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	<==	<==	<==
2	0 (lsb)	0	AFR 6 Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	AFR 6 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	AFR 6 VM Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	3	8	AFR 6 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	4	16	AFR 6 IP Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	AFR 6 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	AFR 6 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	AFR 6 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
3	0 (lsb)	0	AFR 8 Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	AFR 8 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	AFR 8 VM Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	3	8	AFR 8 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	4	16	AFR 8 IP Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	AFR 8 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	AFR 8 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	AFR 8 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
4	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	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	<==	<==	<==
5	0 (lsb)	0	---	Boolean	---	---	---	----	----	----
	1	2	---	Boolean	---	---	---	----	----	----
	2	4	---	Boolean	---	---	---	----	----	----
	3	8	---	Boolean	---	---	---	----	----	----
	4	16	Sensor 8 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	Sensor 6 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	Sensor 4 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	Sensor 2 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
6-7			Exhaust Pressure 2	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: 0x000001B3

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

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	0 (lsb)	0	AFR 9 Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	AFR 9 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	AFR 9 VM Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	3	8	AFR 9 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	4	16	AFR 9 IP Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	AFR 9 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	AFR 9 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	AFR 9 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
1	0 (lsb)	0	AFR 10 Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	AFR 10 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	AFR 10 VM Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	3	8	AFR 10 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	4	16	AFR 10 IP Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	AFR 10 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==

	6	64	AFR 10 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	AFR 10 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
2	0 (lsb)	0	AFR 11 Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	AFR 11 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	AFR 11 VM Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	3	8	AFR 11 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	4	16	AFR 11 IP Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	AFR 11 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	AFR 11 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	AFR 11 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
3	0 (lsb)	0	AFR 12 Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	AFR 12 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	AFR 12 VM Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	3	8	AFR 12 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	4	16	AFR 12 IP Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	AFR 12 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	AFR 12 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	AFR 12 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
4	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	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	<==	<==	<==
5	0 (lsb)	0	---	Boolean	---	---	---	----	----	----
	1	2	---	Boolean	---	---	---	----	----	----
	2	4	---	Boolean	---	---	---	----	----	----
	3	8	---	Boolean	---	---	---	----	----	----
	4	16	Sensor 12 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	Sensor 11 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	Sensor 10 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	Sensor 9 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
6-7			Exhaust Pressure 2	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: 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)		
Byte	**Bit**	**Bitmask**	**Label**	**Data Type**	**Scaling**	**Offset**	**Range**	**Scaling**	**Offset**	**Range**
0	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	<==	<==	<==
	3	8	AFR 1 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	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	<==	<==	<==
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	<==	<==	<==
	3	8	AFR 2 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	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	<==	<==	<==
2	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	<==	<==	<==
	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	---	---	---	----	----	----
4	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	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	<==	<==	<==
5	0 (lsb)	0	---	Boolean	---	---	---	----	----	----
	1	2	---	Boolean	---	---	---	----	----	----
	2	4	---	Boolean	---	---	---	----	----	----
	3	8	---	Boolean	---	---	---	----	----	----
	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	Scaling	Offset	Range	Scaling	Offset	Range
0	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	<==	<==	<==
	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	<==	<==	<==
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	<==	<==	<==
	3	8	AFR 5 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	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	<==	<==	<==
2	0 (lsb)	0	AFR 6 Ready	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	1	2	AFR 6 Heater Open Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	2	4	AFR 6 VM Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	3	8	AFR 6 UN Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	4	16	AFR 6 IP Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	5	32	AFR 6 Heater Time-Out Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	AFR 6 Heater Short Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	AFR 6 Overtemp Error	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
3			---	Boolean	---	---	---	----	----	----
4	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	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	<==	<==	<==
5	0 (lsb)	0	---	Boolean	---	---	---	----	----	----
	1	2	---	Boolean	---	---	---	----	----	----
	2	4	---	Boolean	---	---	---	----	----	----
	3	8	---	Boolean	---	---	---	----	----	----
	4	16	---	Boolean	---	---	---	----	----	----
	5	32	Sensor 6 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	6	64	Sensor 5 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
	7 (msb)	128	Sensor 4 Heating up	Boolean	0 = false, 1 = true	0	0/1	<==	<==	<==
6-7			Exhaust Pressure 2	16 bit unsigned	.001 psig/bit	0	0 to 655.35 psig	.001 psig/bit	0	0 to 655.35 psig