



Emtron ECU Comparison

March 2015

	SL4	SL8	KV8	KV12	KV16
FUNCTIONS					
Injector Channels	4	8	8	12	16
Injector Peak & Hold	No	No	Yes	Yes	Yes
Ignition Channels	4	8	8	12	12
Auxiliary Channels Total	10	10	16	16	16
Auxiliary Channels (high side) (1)	4	4	8	8	8
Auxiliary Channels (Half Bridge) (2)	2	2	4	8	8
DBW Channels	1	1	2	4	4
Dedicated EFI Relay Control	Yes	Yes	Yes	Yes	Yes
ANALOG AND DIGITAL CHANNELS					
Analog Input Channels	10	10	16	16	16
Digital Input Channels	6	8	14	14	14
Analog Output Channels	0	0	1	1	1
Knock Channels	1	2	2	2	2
DI Arming Threshold Ctrl (3)	DI 1-4	DI 1-4	DI 1-8	DI 1-8	DI 1-8
5.0V Sensor Supply Channels	1	1	2	2	2
COMMUNICATIONS AND FEATURES					
Lambda Internal(LSU4.9)	No	No	Yes	Yes	Yes
3-Axis Internal G-Force	No	No	Yes	Yes	Yes
Oscilloscope Channels (4)	2	2	6	10	10
Ethernet Communications	Yes	Yes	Yes	Yes	Yes
CAN Channels	1	2	2	2	2
Dual 100Mhz Processors	Yes	Yes	Yes	Yes	Yes
ECU DATA LOGGING					
DataLogging Size	16MB	16MB	32MB	32MB	32MB
DataLogging Max Rate	250Hz	250Hz	500Hz	500Hz	500Hz
Number of parameters	600	600	600	600	600

1: Auxiliary Channels with high side option.

SL4/8 - High Side Drivers on Auxiliary Channels 5 - 8

KV8 onwards - High Side Drivers on Auxiliary Channels 1 - 8

2: Auxiliary Channels configured as Half bridge (i.e. Push - Pull drivers).

SL4/8 - Auxiliary Channels 9, 10 Half Bridge.

KV8 - Auxiliary Channels 9 - 12 Half Bridge, Auxiliary Channels 13 - 16 Low or High Side.

KV12/16 - Auxiliary Channels 9 - 16 Half Bridge.

3: Digital Inputs frequency arming thresholds.

SL4/8 - DI 5-8 have a fixed frequency arming thresholds. Arming at 1.6V and disarming is 1.4V.

NOTE: This ONLY applies to frequency based signals. Switched inputs still retain ON/OFF thresholds.

4: Oscilloscope Function.

SL4/8 - x2 Channels: Crank and Cam Sensors.

KV8 - x6 Channels : Crank, Cam and DI 1-4.

KV12/16 - x10 Channels : Crank, Cam and DI 1-8