

Electronic Control and Data-Logging Units

The reference table below details the compatibility of the main MESL electronic units with our main expansion units. I/O information including details of interfaces with sensors and lap triggers can be found within the individual product summaries.

Please contact our Technical Consultancy department for details about compatibility with other MESL units and third party units.

Comms Support		Expansion Unit Support	
Function	Link	Function	Link
PCU-400			
System Monitor	Ethernet	SIU-400 via config CAN	CAN
ATLAS	Ethernet	SIU-300 via config CAN	CAN
		SCU-300 via config CAN	CAN
		SN-32 via config CAN	CAN
		LIU-4 via config CAN	CAN
		PIN-3 via config CAN	CAN
		PIN-16 via config CAN	CAN
		TIU-32C via config CAN	CAN
		TPR via config CAN	CAN
EDR-400			
System Monitor	Ethernet	SIU-400	CAN
ATLAS	Ethernet	SIU-300 via config CAN	CAN
CBT-610	RS232	SCU-300 via config CAN/APP for LEDs	CAN
		SN-32 via config CAN	CAN
		LIU-4	CAN
		PIN-3 via config CAN	CAN
		PIN-16 via config CAN	CAN
		TIU-32C (2off)	CAN
		TPR via config CAN	CAN
		PCU-400 via config CAN	CAN
		PCU-6 can be supported through the customer application	PCU
		PCU-6C can be supported through the customer application	PCU
		PCU-6D can be supported through the customer application	PCU
		PCU-6C-CAN can be supported through the customer application	CAN
		DataTAG	CAN
TAG-400			
System Monitor	Ethernet	SIU-400	CAN
ATLAS	Ethernet	SIU-300 via config CAN	CAN
CBT-610	RS232	SCU-300 via config CAN/APP for LEDs	CAN
		SN-32 via config CAN	CAN
		LIU-4	CAN
		PIN-3 via config CAN	CAN
		PIN-16 via config CAN	CAN
		TIU-32C (2off)	CAN
		TPR via config CAN	CAN
		PCU-400 via config CAN	CAN
		PCU-6	PCU
		PCU-6C	PCU
		PCU-6D	PCU
		PCU-6C-CAN can be supported through the customer application	CAN
		DataTAG	CAN

Electronic Control and Data-Logging Units

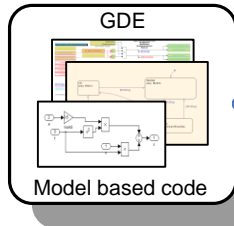
Comms Support		Expansion Unit Support	
Function	Link	Function	Link
HSL-500			
System Monitor	Ethernet	SIU-400	CAN
ATLAS	Ethernet	SIU-300	CAN
CBT-610	Arcnet	SCU-300 via config CAN/APP for LEDs	CAN
		SN-32 via config CAN	CAN
		LIU-4	CAN
		PIN-3	CAN
		PIN-16	CAN
		TIU-32C	CAN
		TPR	CAN
		PCU-6C-CAN can be supported through the customer application	CAN
		PCU-400	CAN
TAG-310B			
System Monitor	Ethernet	SIU-400	CAN
ATLAS	Ethernet	SIU-300	CAN
CBT-610	HDLC	SCU-300 Config CAN/APP for LEDs	CAN
		SN-32 via config CAN	CAN
		LIU-4	CAN
		PIN-3	CAN
		PIN-16	CAN
		TIU-32C	CAN
		TPR	CAN
		PCU-400	CAN
		PCU-6	PCU
		PCU-6C	PCU
		PCU-6C-CAN can be supported through the customer application	CAN
		PCU-6D	PCU
		HIU-3	CAN/HSD
		SN-32	SBUS
		SN-32LT	SBUS
		PB2006	CAN/DIG
		IGN-310	CAN/DIG
		INJ-310	CAN/DIG
		ICU-308	CAN/TRIGGER

Example system configurations for datalogging, control and telemetry are given over the next few pages. These diagrams give examples of how the different units can work together, but these are not fixed solutions so please do not hesitate to contact us if you would like to discuss your requirements with us.

Electronic Control and Data-Logging Units

TAG-400 development system

Model based development environment for control strategies and processing algorithms compiled for embedded target



Engine control unit

TAG-400

8 Cylinder engine control
Onboard ignition and injection drive stages
Lambda and knock interfaces
100baseT ethernet
2x CAN interfaces
Onboard logging memory and data acquisition system

Application tool

System Monitor

Program version management
ECU reprogramming
Data tuning
Live parameter display
Puma link
ActiveX interface
CAN configuration
Data Acquisition configuration

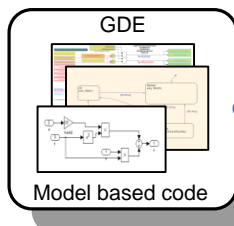
Data analysis

ATLAS

Live data display via ethernet or wireless
Upload of logged data
Waveform, scatter, bar chart, histogram, FFT display types
MATLAB export
Numeric functions
ActiveX interface

EDR-400 development system

Model based development environment for control strategies and processing algorithms compiled for embedded target



EDR-400

32 Analogue inputs
2 Thermocouple inputs
7 DHE inputs
7 Drive stage outputs
100baseT ethernet
2x CAN interfaces
Onboard logging memory and data acquisition system

Application tool

System Monitor

Program version management
ECU reprogramming
Data tuning
Live parameter display
ActiveX interface
CAN configuration
Data Acquisition configuration

Data analysis

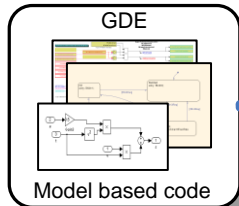
ATLAS

Live data display via ethernet or wireless
Upload of logged data
Waveform, scatter, bar chart, histogram, FFT display types
MATLAB export
Numeric functions
ActiveX interface

Electronic Control and Data-Logging Units

TAG-310B development system

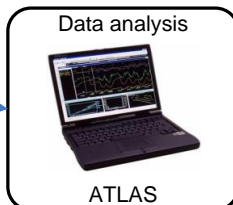
Model based development environment for control strategies and processing algorithms compiled for embedded target



Upto 10 Cylinder engine control
62x 12bit and 35x 10bit 0-5V analogue i/ps
8x DHE inputs
34x drive stage o/ps
12x Moog valve drives
Lambda and thermocouple interfaces
100baseT ethernet, 6x CAN interfaces
1Gbyte Onboard logging memory and data acquisition system



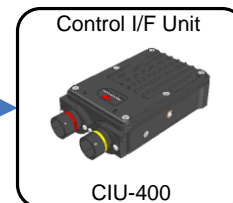
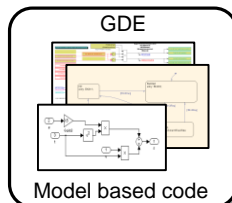
Program version management
ECU reprogramming
Data tuning
Live parameter display
Puma link
ActiveX interface
CAN configuration
Data Acquisition configuration



Live data display via ethernet or wireless
Upload of logged data
Waveform, scatter, bar chart, histogram, FFT display types
MATLAB export
Numeric functions
ActiveX interface

CIU-400 development system

Model based development environment for control strategies and processing algorithms compiled for embedded target (GDE base product with CIU-400 target package)



13x 1kHz analogue inputs
1x DHE input
2x 4A High side drive stages
4x 2A High side drive stages
3x CAN interfaces
Application support for model based code
CAN application tool interface either direct to System Monitor as a stand alone system or via a host ECU.

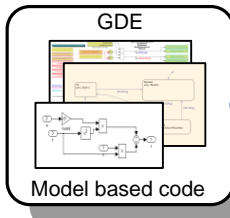


Program version, tune data management and ECU reprogramming of combined system (CIU-400 and host ECU)
Live parameter display
Puma link
ActiveX interface
CAN configuration for host ECU
Data Acquisition configuration for host ECU

Electronic Control and Data-Logging Units

HSL-500 development system

Model based development environment for control strategies and processing algorithms compiled for embedded target



High speed logger



HSL-500

- 12x 400kHz 12bit analogue 0-5V
- 36x 100kHz 12bit analogue 0-5V
- 8x DHE inputs
- 1x Lap trigger I/P
- 1Gbit ethernet
- 6x CAN interfaces
- 1x ARCNET link to telemetry transmitter
- 2Gbyte Onboard logging memory and data acquisition system

Application tool



System Monitor

- Program version management
- ECU reprogramming
- Data tuning
- Live parameter display
- ActiveX interface
- CAN configuration
- Data Acquisition configuration

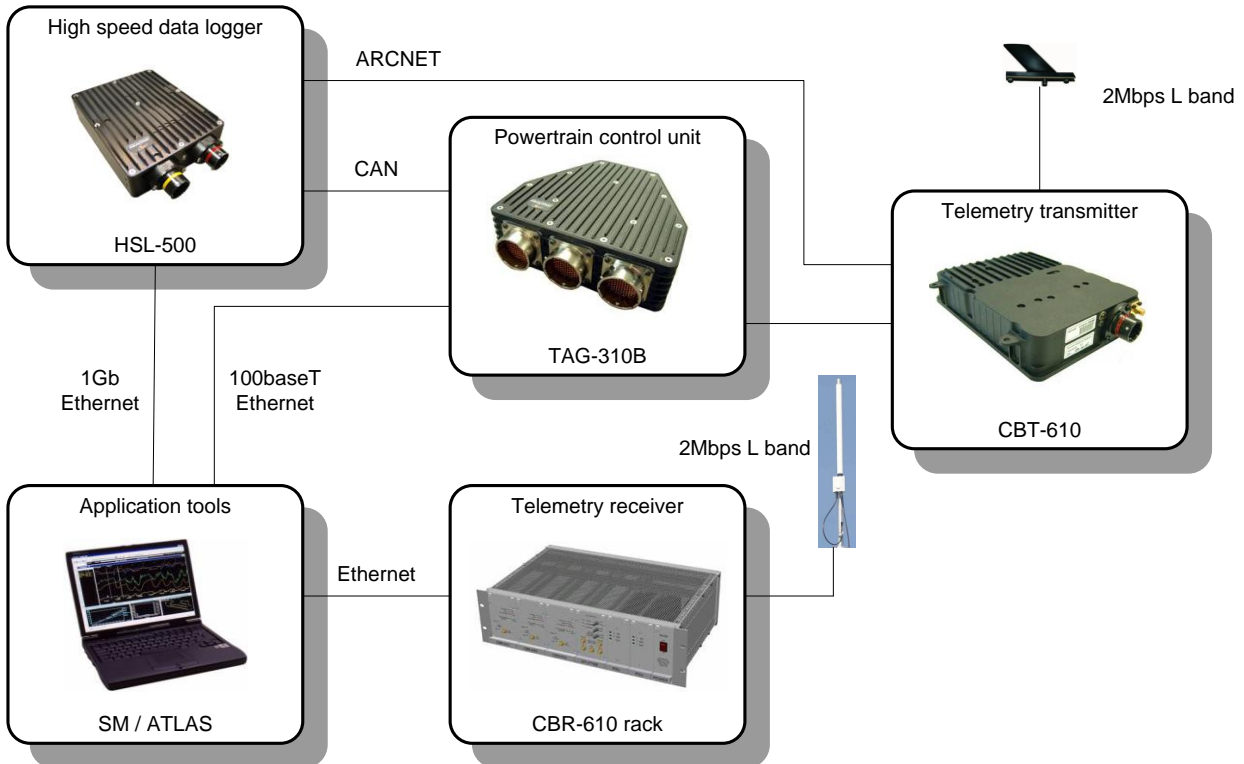
Data analysis



ATLAS

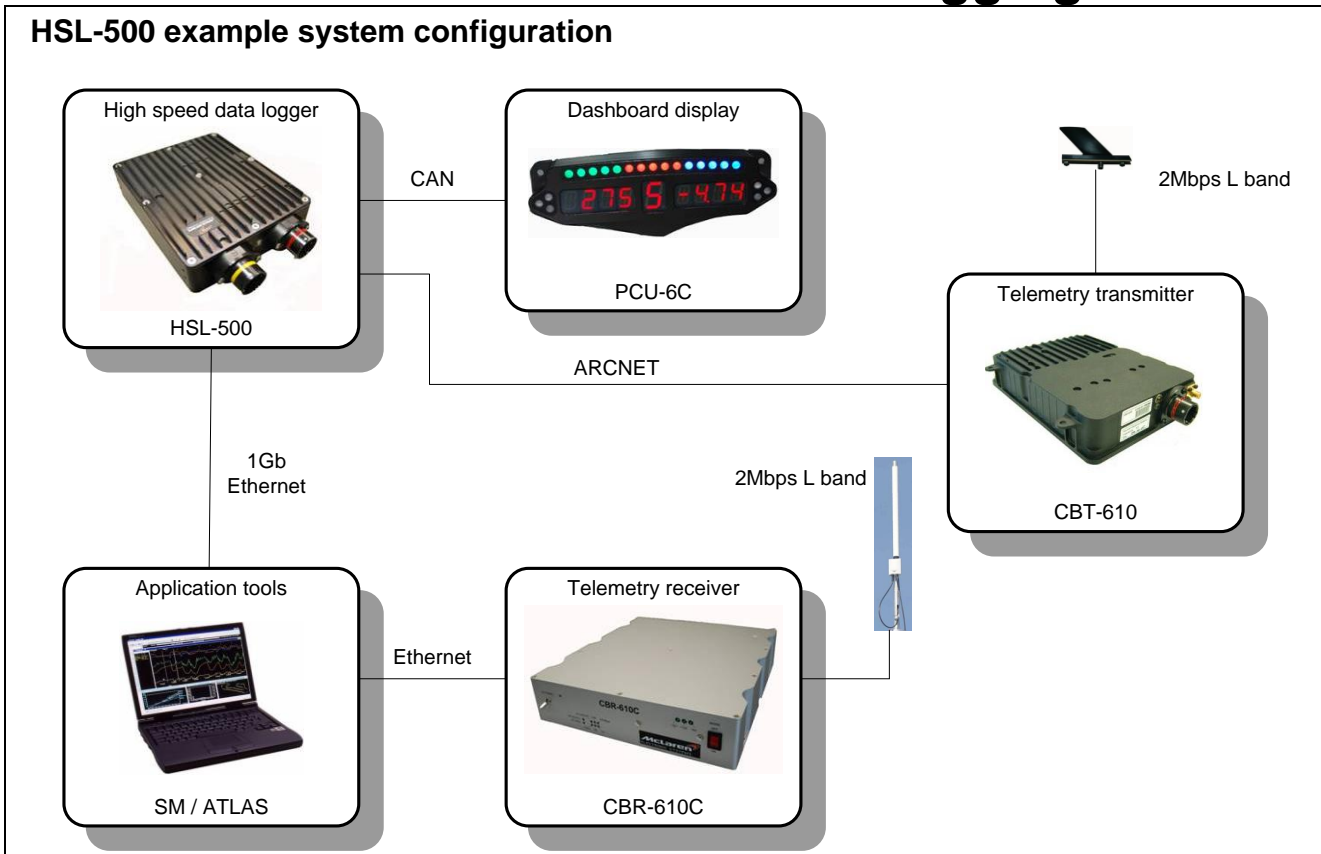
- Live data display via ethernet or wireless
- Upload of logged data
- Waveform, scatter, bar chart, histogram, FFT display types
- MATLAB export
- Numeric functions
- ActiveX interface

HSL-500 example system configuration

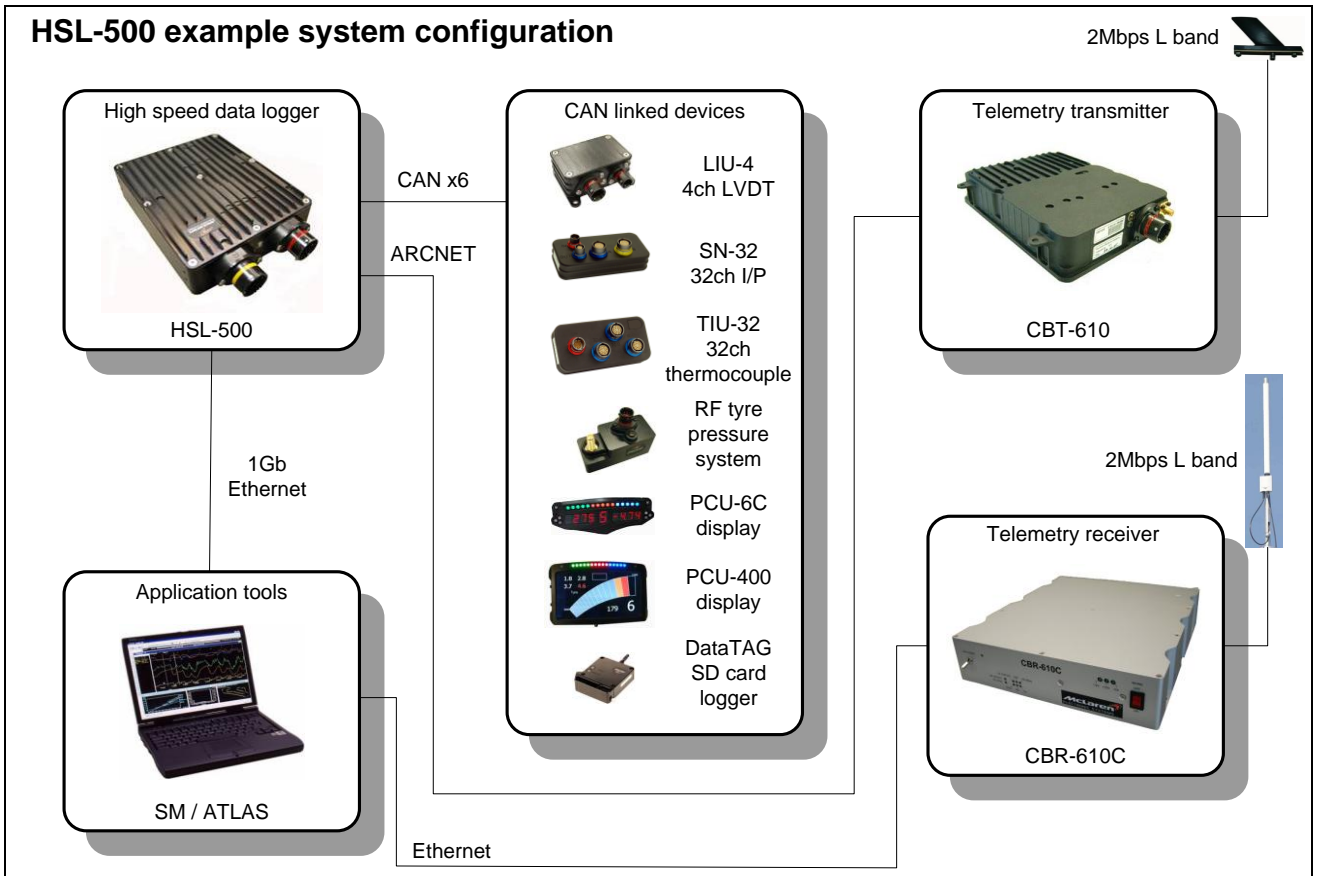


Electronic Control and Data-Logging Units

HSL-500 example system configuration



HSL-500 example system configuration



Electronic Control and Data-Logging Units

