

Powertrain & Chassis Control Unit CIU-100

CIU-100 is a cost-effective auxiliary processing unit for general purpose control applications. The CIU-100 provides a powerful 128MHz processing platform with 1kHz sampling of analogue input channels and actuation of high/low side drive stage pairs. A PowerPC processor provides the processing resource for application code which may be autocoded from Matlab/Simulink using our GDE and reprogrammed using the System Monitor application tool.

The unit includes three CAN interfaces for communication with System Monitor, the host ECU and other CAN linked system devices.

The CIU-100 can be used as a stand-alone control unit with a direct CAN connection to System Monitor for programming and configuration or could make an ideal companion to one of our ECUs.

In Detail

Application

- General control applications
- Solenoid/hydraulic system control
- Interfacing to remote sensors
- CAN linked I/O expansion

Electrical

- Supply Voltage 8 to 16V DC
- BIOS 32-bit Real Time Operating System
- 128MHz 32-bit application processor
- System memory: 2Mbyte Flash, 64kbyte SRAM
- 40MHz monitor processor for SIL functionality

Sensor Inputs

- 21 general purpose 0 to 5V analogue inputs
- Six NTC (configurable as analogue, 0 to 5V)
- Eight speed sensor inputs (Schmidt)

- Two general purpose digital inputs (12V)
- One "ignition switch" input, with keep-alive

Outputs

False

Communications

- Three CAN bus interfaces up to 1Mbps (two with wake-up)

Diagnostics

- Dual on-board temperature sensors
- Dual hardware and software watchdogs
- Onboard power supply sensing and I/O diagnostics

Mechanical

- Cast aluminium housing, black painted pressed steel lid
- Weight 850g

Connection Definition

- One 154-way connector divided into two cavities (96, 58-way)

For pin numbers, please request further details from our Technical Consultancy Department.

Environmental

- Permanently sealed (water resistant to IP6K)
- Maximum humidity 100%
- Operating temperature -40°C to +85°C (as seen internally)
- Storage Temperature -10°C to +85°C

- Vibration 100 to 1000Hz, all axes, 24 hours
- Vibration isolation is recommended

Electro Magnetic Compatibility

- Complies with the essential protection requirements of 89/336/EEC

Images/Diagrams

O 030 110 015 000

Ordercodes

Description	Ordercode
CIU-100	O 030 110 015 000