CONCEPT 4000 Data Sheet: Control Module Expansion

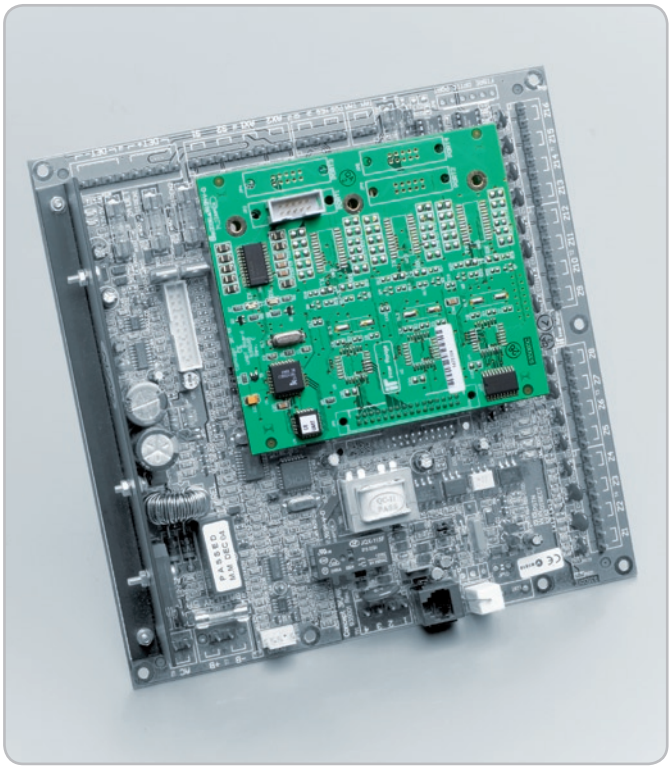
Serial and Ethernet UART Boards

Plugging directly on to the Control Module, Serial UART boards provide up to four high-speed, software configurable, serial ports to allow interaction with third party building automation systems and connection of peripheral serial devices to the Concept 4000 Control Module.

The Ethernet UART provides a 10BaseT Ethernet connection between the Concept 4000 control module and Insight software in addition to up to three serial ports. This allows communications over LANs, WANs, VPNs and the internet. The dedicated IP based Insight protocol combined with the 128 bit AES encryption allows users seamless administration of earth spanning access and security systems.

Up to four simultaneous connections can be maintained via the UART board - an operator using Insight can be communicating with a Control Module whilst the Control Module is interacting with building automation systems and so forth.

Specific cables are available for connection to printers, modems, PCs and 3rd party interfaces.



Features:

- Allows up to four concurrent, high level serial connections
- Serial UART available in Single, Dual or Quad port versions
- Ethernet UART available in Single (Ethernet + 1 serial) or Multiport (Ethernet + 3 serial) versions
- Plugs directly on to the Concept 4000 Control Module
- Allows communication speeds of up to 19200 baud

SPECIFICATIONS

Physical

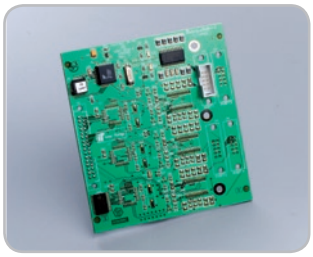
PCB Dimensions	115(L) x 104(W) (mm)
Installation Environment	0°C - 40°C @15% - 85% Relative Humidity (non-condensing)

Electrical

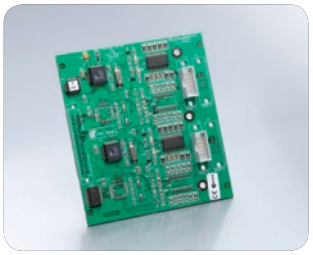
Input Voltage to PCB	Via Host Control Module				
	1 Port Serial	**2 Port Serial**	**4 Port Serial**	**Ethernet + 1 Serial**	**Ethernet + 3 Serial**
Operational Current (Min).	20mA	20mA	20mA	100mA	120mA
Serial Ports (Full RS232)	1	2	4	1	1 + 2 x TxD/RxD and RTS/CTS
Max. Baud Rate	Supports a max of 38,400 baud. Note that if all 4 serial ports are used, the sum of the baud rates must not exceed 38,400; (e.g. Port 1-19,200, Port 2-9,600, Port 3-9,600).				

Ordering Options

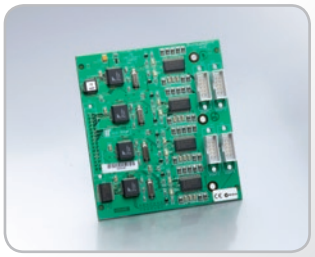
995065 1 Port Serial UART



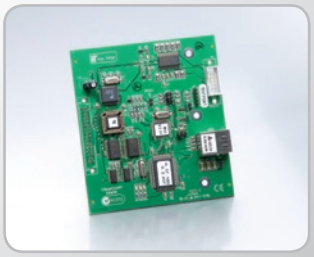
995066 2 Port Serial UART



995068 4 Port Serial UART



995090 Ethernet UART + 1 Serial Port

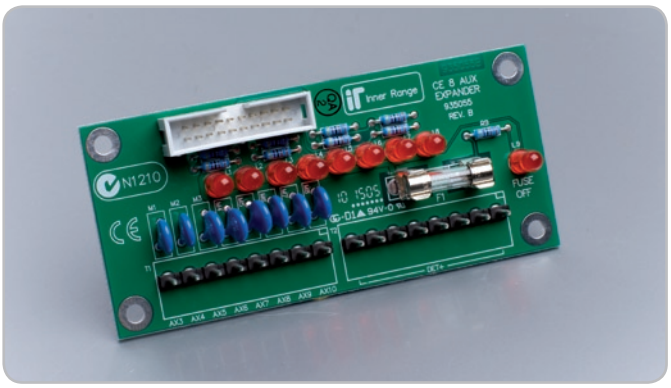


8 Auxiliary Output Expander Board

This handy expansion board complements the two on-board auxiliary outputs on the Concept 4000 Control Module with the addition of eight open-collector outputs. The board connects directly onto the Control Module.

Features:

- 8 open-collector outputs
- Each output can switch up to 100mA
- Connects directly to the Concept 4000 Control Module



SPECIFICATIONS

Physical

PCB Dimensions	110(L) x 48(W) (mm)
Installation Environment	0°C - 40°C @15% - 85% Relative humidity (non-condensing)

Electrical

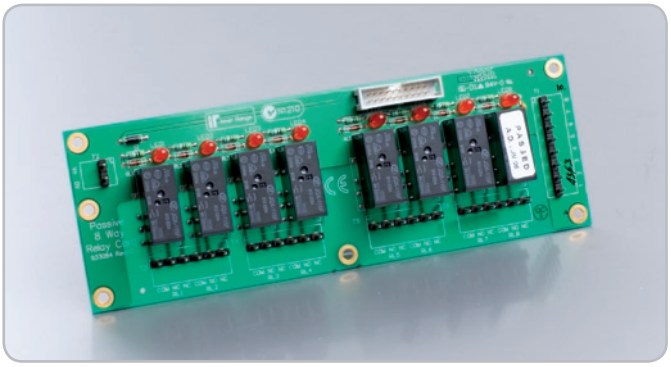
Input Voltage to PCB	Via host Control Module
Operational Current	Min.: 20mA

Outputs

Outputs (open collector)	8
Max. switchable current per output	100mA
Max. combined output current	To be included within the constraints of the host Control Module

8 Way Passive Relay Board

For general purpose switching applications like process control, warning devices, simple building automation and even control of door locks, etc, the 8 Relay Expander Board adds 8 relays which can switch high-current, low voltage loads.



SPECIFICATIONS

Physical

PCB Dimensions	200(L) x 68(W) (mm)
Installation Environment	0° – 40°C @ 15% to 85% Relative humidity (non-condensing)

Electrical

Input Voltage to PCB	Via host Control Module
Operational Current	Min.: 60mA (per relay when energised) Max: 480mA (All relays active)

Outputs

Relay outputs	8
Max. switchable current per relay.	10A @ 30VDC (resistive load) per relay
Max. combined output current	To be included within the constraints of the host Control Module

Ordering Options

995091 Multiport Ethernet UART (1 Ethernet + 3 Serial Ports)

995055 8 Auxiliary Output Expander Board

995084 8 Way Passive Relay Control Module Version