



Omni8/16C/10C Serial Interface Board

Model C1423 Serial Interface Board for Omni8/16C/10C.

DATASHEET



Serial Interface Board with Modbus Protocol

FEATURES

- **Serial Interface (RS232/RS485) for Omni8/16C/10C**
- **Modbus Protocol - Slave**
- **Optional RTU or ASCII modes**
- **Selectable Baud Rate**
- **Default mode for easy access**
- **RS485 Address set on "DIP" Switch**

The Modbus serial Interface options board allows the annunciator/RLU to become a Modbus slave device on RS232 or RS485 communications network.

This enables Omni8/16C/10Cs to receive inputs serially instead of hardwired or for other serial devices to access the hardwired input status via the serial port.

Up to 15 Omni8/16C/10Cs be multi-dropped on an RS485 port and all data transmitted or acquired serially.

The serial Interface allows the annunciator to be used in a complimentary role with PLCs or SCADA. Using Modbus communication critical alarms can be routed from the SCADA to Annunciator forcing operator intervention as well as external audible and visual indication of alarms. In a similar way a PLC can be offloaded from the task of processing alarms by routing this function to the annunciator.

SPECIFICATIONS

Serial Port

Type	Single DB9 connector available on the rear of the unit supporting both RS232 and RS485 specifications
Isolation	Serial Port galvanically isolated from display logic and power supply. Tested to 1500Vac for 60 seconds.
Protocol	Modbus slave RTU or ASCII mode
Baud Rate	"DIP" Switch set 1200 – 9600 baud
Address range	"DIP" Switch set: 1 – 15.

Temperature Range

Operating Temperature	0 °C – 60 °C (+32 °F – 140 °F)
Humidity	Up to 90% RH, non condensing is recommended
Storage Temperature	-10 °C – 70 °C (+14 °F – 158 °F)
Humidity	Less than 40% RH recommended

Modbus Register Layout

Reg. No	Description	Read/Write
0	<u>Dynamic Data</u> 16 Inputs as bits	R/W
1	16 Alarm Statuses as bits	R
2	5 Pushbutton Control Bits (plus read only 1st out and Flash sync bits)	R/W
3	Common Service Relays etc. Status Bits	R
4-11	Lamp Status bytes – one per window.	R/W
23	Alive Counter	R
24	Software Version Number	R
	<u>Static/Configuration Data</u>	
100	Product Type (14801 for this product)	R
101-108	16 Display Sequence Settings	R/W
109-116	16 Timer Settings	R/W
117	Relay Function set	R/W
119-122	Four Relay Output Alarm membership	R/W
123-126	Four Group Alarm Types	R/W
127	First-out Group split	R/W
128-133	Reserved	R/W
134	Miscellaneous Setup options	R/W

Ordering Information

Model Number	Description
C1423A	Serial Interface Board for Omni8/16C Annunciators
C1423A-1	Serial Interface Board for Omni10C Annunciators
C1423B	Serial Interface Board for Omni8/16C RLUs