

**3.3.15 ML100 Dedicated Interface Module**

**Control Power**

Power Requirements: From Control Module ML100 Interface connector: +5Vdc/0.1A, +8Vdc/0.4A, -6.5Vdc/1mA

**Communications**

Port: 1 Dedicated parallel connection  
 Interconnect: 26-pin IDC ribbon cable  
 Cable Length: 3 feet maximum

**Environment**

Approval: CSA NRTL/C  
 Class 1, Div.II, Groups A,B,C,D  
 Class 1, Zone-2, Groups IIC  
 Operating Range: -40°C to +60°C  
 (LCD Display: -20°C to +60°C)  
 (VFD Display: -40°C to +60°C)  
 Conformal Coating: Boards conformal coated for hostile environments

**User Interface**

Display: 16-character x 2-line LCD or VFD  
 Alpha-numeric display  
 Keypad: 9 tactile keys, polyester faceplate  
 - Setpoint, measured, status  
 - Message Up, Message Down  
 - Value Up, Value Down  
 - Reset  
 - Store  
 Contrast: Adjustable by potentiometer  
 Panel Indicators: Power on  
 Current heater display on  
 Serial communication active  
 System alarm  
 Process alarm

**Bezel**

Material: 304 Stainless steel  
 Mounting: For mounting on NEMA-12 or NEMA-4 enclosure door. Includes gasketing.  
 Optional: 304 Stainless steel shroud with plexi-glass hinged cover to protect keypad from physical damage.

**3.3.16 MR100 Group Interface Module**

**Control Power**

Power Requirements: 12VA @ 120Vac, 50 or 60Hz

**Communications**

Ports: 1 Serial network connections  
 Type: RS485  
 Protocol: Modbus® RTU.  
 Transmission Rate: 600, 1200, 2400, 4800, 9600 baud.  
 Interconnect: 2-wire, shielded, twisted pair.  
 Highway Distance: 4,000 feet without repeater.  
 Modules per Highway: (1) MR100 and (30) Control Modules.

**Environment**

Approval: CSA NRTL/C  
 Class I, Div.II, Groups A,B,C,D  
 Class I Zone 2, Group IIC  
 Operating Range: -40°C to +60°C  
 (LCD Display: -20°C to +60°C)  
 (VFD Display: -40°C to +60°C)  
 Conformal Coating: Boards conformal coated for hostile environments

**Alarm**

Alarm Output: Programmable for NO or NC contacts  
 One DC opto-isolated contact  
 One dry mechanical contact  
 Alarm Output Rating:  
 Hazardous Areas: DC contact: 30Vdc/0.1A, 500mW max  
 Dry mech contact: 30Vdc/10mA max  
 250Vac/0.5A max  
 (not subject to a corrosive environment)  
 Ordinary Areas: DC contact: 30Vdc/0.1A, 500mW max  
 Dry mech contact: 120Vac/1.0A max  
 30Vdc/0.1A max  
 Alarm Light Output: LED Indicator: 12Vdc/30mA  
 Alarm Messages: Refer to Control Module Specifications

**User Interface**

Display: 16-character x 2-line LCD or VFD  
 Alpha-numeric display  
 Keypad: 9 tactile keys, polyester faceplate  
 - Setpoint, measured, status  
 - Message Up, Message Down  
 - Value Up, Value Down  
 - Reset  
 - Store  
 Contrast: Adjustable by potentiometer  
 Panel Indicators: Power on  
 Current heater display on  
 Serial communication active  
 System alarm  
 Process alarm

**Bezel**

Material: 304 Stainless steel  
 Mounting: For mounting on NEMA-4/4X enclosure door. Includes gasketing.  
 Optional: 304 Stainless steel shroud with plexi-glass hinged cover to protect keypad from physical damage.

Specifications subject to change without notice.