Focus Controller for Range Lenses

- The Focus Controller Module is an embedded micro-controller servo system used to position a focusing element in the Brashear LP series of catadioptric range lenses. The Lens Focus Controller receives commands through a serial communications interface to a host computer and is designed to support a number of different command protocols.
- Lens operation can be either Focus on Range or Focus on Position.
- The Model FR-1 Lens Focus Controller can be used with existing Brashear LP SR-50, SR-100, and SR-150 lenses with the current focus module.
- The Model FR-2 Lens Focus Controller can be incorporated into the new SR-100W.
- Features a COTS micro-controller and micro-controller interface board, with analog inputs, digital inputs and digital outputs.
- Serial interface is configurable to RS-232, RS-422 or RS-485 at selected common baud rates and line parameters.
- External focus electronics no longer needed
- Lens focus characteristics and performance constants are field changeable via the maintenance serial link.
- Buffered analog inputs and digital I/O available for custom applications
- With a compact, self-contained design and a simple serial communications interface, it is ideal for field upgrades.
# Lens Focus Controller Specifications

**Environmental:**
- **Operating Temp.** -40 to +50 deg C
- **Humidity** Non-condensing relative to 95%
- **Storage Temp.** -40 to +70 deg C

**Positioning:**
- **Range** Lens dependent
- **Resolution** 12 bits
- **Accuracy** Lens dependent
- **Modes** Local or Remote
  - Focus on Range or
  - Focus on Position

**Interface:**
- **Electronic:** RS-232/RS-422/RS-485, 9600 or custom baud
- **Power:** 120 VAC or 24 VDC (18-33 VDC)
- **Position Input:** 10 k multi-turn potentiometer
- **Motor drive:** 12-24 VDC PWM
- **Analog Inputs:** 4 buffered and 2 non-buffered analog inputs available
- **Digital Inputs:** 5 contact inputs available
- **Digital Outputs:** 8 TTL D0s available for expansion

**Dimensions:**
- **H/W/L** 6.25/8.00/5.00 in
- **Weight** 4.5 lb

**Models:**
- **FR-1** WSMR protocol, SR-50, 100, 150
- **FR-2** WSMR protocol, SR-100W
- **FP-1** NAWC China Lake protocol, SR-50, 100, 150
- **FP-2** NAWC China Lake protocol, SR-100W