# MODULOC Control Systems

## ESD1K.003 LDM SECONDARY ENVIRONMENTAL ENCLOSURE

- ***Secondary Environmental Enclosure with Peltier Cooling.***
- ***For use with the ELDP and MDHD Family of Laser Distance Meters.***
- ***Provides cooling where ambient temperatures can reach up to 75°C.***
- ***Robust Design Provides Mechanical Protection for the LDM.***
- ***Adjustable Mounting Platform, provides Vertical and Horizontal Axis Adjustments.***

### *Features*

- Heavy Duty Durable Design
- Provides additional mechanical protection of Laser Distance Meter.
- Adjustable Mounting Platform, providing Vertical and Horizontal Axis Adjustments.
- Thermostatically controlled Peltier Cooling allowing the Laser Distance Meter to be used in areas where the ambient temperature exceed its 55°C rating.
- Over-temperature switch for remote alarm when internal temperature of enclosure exceeds 55°C.
- Side Mounted Junction Box with Terminal Block for all electrical connections to the Peltier Cooling and Laser Distance Meter.

### *ELDP & MDHD Product Family*

- ELDP10 for measurements to a reflector panel at distances over 80M or to natural surfaces up to 20M.
- The MDHD20HT is designed for measurements off of a red hot surface up to 1 4 0 0 °C at distances up to 20M.
- MDHD100 for measurements to a reflector panel at distances up to 800M or to natural surfaces up to 155M.
- MDHD600 for measurements to a reflector panel at distances up to 600M & Glass Prism reflectors up to 1200M.
- Additional Secondary Environmental Enclosures are available including air purged, and water cooled.

### *Typical Applications*

Crane applications in hot areas where the maximum ambient temperature is between 55°C - 75°C.
Furnace applications in hot areas where the maximum ambient temperature is between 55°C - 75°C.
Any Laser Distance Meter application in hot areas where the maximum ambient temperature is between 55°C - 75°C.

### *Description*

The ESD1K.003 Laser Distance Meter Secondary Enclosure with Peltier Cooling provides additional mechanical protection plus Peltier Cooling. The ESD1K.003 allows use of the Laser Distance Meter in areas where the ambient temperature exceeds the specified maximum allowable temperature rating. The ESD1K.003 includes an adjustable Mounting Platform which provides a 20mm Vertical Axis Adjustment and a 20° Horizontal Axis Adjustment during alignment. The Peltier Cooling is thermostatically controlled and is preset to operate when the internal temperature of the ESD1K.003 exceeds 35°C. In addition an over-temperature switch is provided. The NC contact of the over-temperature switch changes state when the internal temperature of the ESD1K.003 exceeds 55°C. This contact can be used to activate a remote alarm. A side mounted Junction Box is provided with a terminal block. This provides easy connection to the Peltier Cooling supply voltage, the internal over-temperature switch, the Laser Distance Meter supply voltage and the 4-20 mA output.

**MODULOC Technology - The Total Laser Solution**

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## *ESD1K.003 Technical Info*

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|---|---|
| **Peltier Cooling Supply Voltage** | 24VDC, 10A |
| **Terminal Block Connections** | Peltier Cooling supply voltage |
| | Internal Over-temperature Switch |
| | Laser Distance Meter Supply Voltage |
| | 4-20 mA Analog Output |
| **Maximum Ambient Temperature** | 75°C |
| **Internal Over-temperature Switch Setting** | 50°C |
| **Dimensions** | 335mm High x 15mm wide x 425mm Long |
| **Weight** | 13 kg (without the LDM) |



Your Local Sales Representative:


We reserve the right to alter specifications without prior notice. Specifications without tolerances are typical values.



Bulletin MC-ESD1K.003-08-01
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