

MD1000D SERIES LASER DISTANCE METERS

Powerful Class I Long Range ToF Laser Distance Meter Fast 20 kHz measuring rate with built in display and keypad



General Characteristics:

- Totally safe Class I Laser
- Ranges of up to 800 m and fast 20 KHz update rate
- High accuracy, high resolution and high measuring rate
- Laser Pointer for the adjustment
- Interfaces: Serial: RS-232/RS-422
Analog: 4..20 mA
Profibus DP
2x digital outputs
- Active dynamic control
- Modern lightweight robustness
- Simple 4 key configuration and display
- External Configuration software provided
- Close-up range blanking for front glass dirt/dust suppression
- Rain filter blanking
- Internal device temperature to read out via interface
- Keyable Visible Laser Beam for easy adjustment
- Easy 4 electrical plug connection

Short description:

The MD1000D Series of Laser Distance Meters measure via ToF (Time of Flight) technology over distances of up to 800m off reflector panels and upto 110m off natural targets. With their large measuring range these devices can be used in many different industries and for a large variety of tasks.

These Sensors transmit via extremely short multiple light pulses, then measure the running time of these pulses to the object and back, thus computing from this the distance.

The measuring data is sent serially over dual RS232/RS422 and Profibus DP interfaces as well as a programmable analogue 4 - 20 mA output. Two further switching outputs are provided that can be configured in logic and band width.

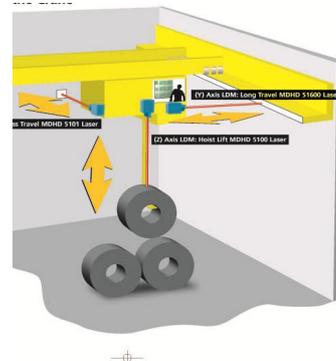
The application range is evaluated via internal microprocessor to provide high accuracy by controllable averaging as well as accommodating high-dynamic movement rate. Specific distances can be defined as threshold trip levels initiated by either rising or falling values.

The MD1000D-R Laser Distance Meters are the ideal solution for crane control, especially for high speed long travel of up to 800m with its fast 20 KHz measuring rate. Furthermore, with its narrow 2 mrad diverging beam accommodates crane crabbing, yet does not require large reflector panels.

The MD1000D-T Laser Distance Meter with its 2 mrad diverging beam and fast measuring rate is well suited for measuring off product on the move at distances of upto 110m dependant on surface nature.

Typical Applications:

- Positioning of cranes
- Collision Avoidance
- Positioning of Automated Vehicles
- Measurement & positioning of Product



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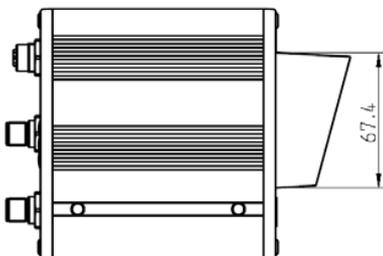
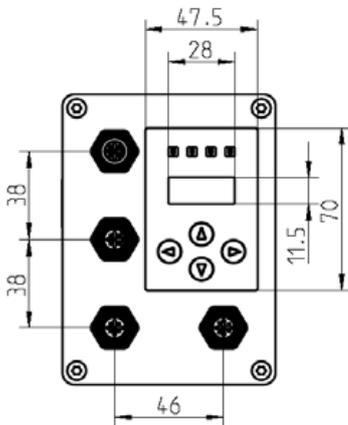
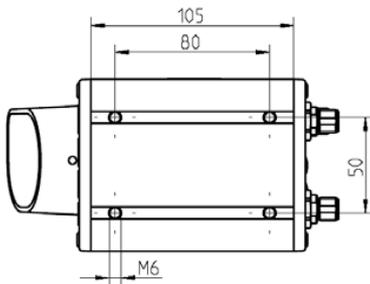
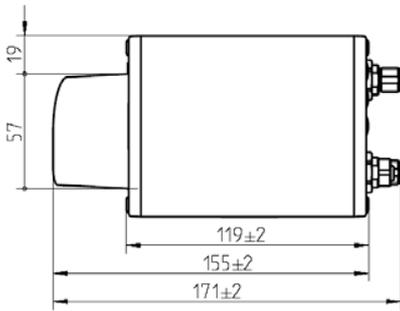
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Technical Data for MD1000-D



Specification	MD1000D-R	MD1000D-T
Interfaces: RS232/422	✓	✓
4-20mA	✓	✓
Profibus DP	✓	✓
Digital Outputs 2xPNP In/Out	E1, E2	E1, E2
Reflection Foil Range	1...500m	3 to 110m dependant on surface nature
HR Plastic Reflectors Range	1...800m	1...800m
Reproducibility:	< 0.5mm	< 50mm
Measuring Rate:	20kHz	20kHz
Resolution:	0.1mm adjustable	10mm
Laser Class: Measuring Laser	Class 1 (905mm)	Class 1 (905mm)
Laser Pointer:	Class 2 (660mm)	Class 2 (660mm)
Divergence: Measuring Laser:	2 mrad	2 mrad
Laser Pointer:	1 mrad	1 mrad
Measuring Beam Size:	Ø 1000mm at 500m	Ø 150mm at 20m
Output Distance:	ASCII-T-ext	Not provided
Display / Controls: Function Indicator 4 LEDs	✓	✓
Control Pad (4 keys) for parameterisation	✓	✓
Backlit Display for value display and parameter settings	✓	✓
Electrical Supply: Voltage:	18 upto 30 VDC	18 upto 30 VDC
Current:	0.25 A (24V)	0.25 A (24V)
Environmental Protection Class:	IP65	IP65
Shock and Vibration:	IP65	IP65
Temperature Range: Operation:	-10°C +50°C	10°C +50°C
Storage:	-30°C upto +70°C	-30°C upto +70°C
Weight:	1.5 kg	1.5kg

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MODULOC
Control Systems

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

Your Local Area Representative:

