

# Distance Sensors - Optical

## DPE-10-500

- Reliable measurements on dark surfaces – even under solar radiation during outdoor operations
- Serial interfaces (RS-232,-422,-385,SSI)
- Analog output 0/4 ... 20 mA
- Digital inputs and outputs (standard)
- Further functions can be configured by the customers
- Optional interfaces on request:  
PROFIBUS (external),  
PROFINET, EtherNet/IP, EtherCAT

### Mechanical Data

| Type                   | DPE-10-500                         |                       |
|------------------------|------------------------------------|-----------------------|
| Dimensions (L x W x H) | 140 x 78 x 48 mm                   |                       |
| Laser                  | visible, red (Laser Class 2, <1mW) |                       |
| Laser dot              |                                    |                       |
| at 10 m                | 7 x 3 mm                           |                       |
| at 50 m                | 28 x 13 mm                         |                       |
| at 100 m               | 55 x 30 mm                         |                       |
| Material               |                                    |                       |
| Housing                | aluminium                          |                       |
| Weight                 | 350 g                              |                       |
| Measuring range        |                                    |                       |
| on reflecting foil     | ~0,5 ... 500 m                     |                       |
| on Natural surfaces    | 0,05 ...~100 mm                    |                       |
| Accuracy               | ±1 mm<br>[at ±2 σ]                 | ±0,5 mm<br>[at ±1 σ]  |
| Repeatability          | ±0,3 mm<br>[at ±2 σ]               | ±0,15 mm<br>[at ±1 σ] |
| Operating temperature  | -40°C ... +60°C                    |                       |
| IP rating              | IP65                               |                       |

### Electrical Data

| Type                        | DPE-10-500                                                                                                                                                                                                                                        |  |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Power supply                | 12 ... 30 VDC                                                                                                                                                                                                                                     |  |
| Power consumption           | 0,5 A [at 24 VDC]                                                                                                                                                                                                                                 |  |
| Max- measuring rate         | 250 Hz                                                                                                                                                                                                                                            |  |
| Max. output rate            | 1 kHz                                                                                                                                                                                                                                             |  |
| Analog output, programmable | 0/4 ... 20 mA                                                                                                                                                                                                                                     |  |
| Analog output error         | ±0,1 %                                                                                                                                                                                                                                            |  |
| Connection                  | internal screws terminal                                                                                                                                                                                                                          |  |
| Interfaces                  |                                                                                                                                                                                                                                                   |  |
| Standard                    | Analog output, programmable, 0/4...20 mA,<br>1 digital input, programmable<br>2 digital output, programmable<br>1 digital error display (NPN, PNP, Push-Pull)<br>Serial interfaces: RS-232, RS-422 / RS-485, SSI<br>1 USB, only for configuration |  |
| Optional                    | PROFIBUS (external), PROFINET, EtherNet/IP, EtherCAT                                                                                                                                                                                              |  |

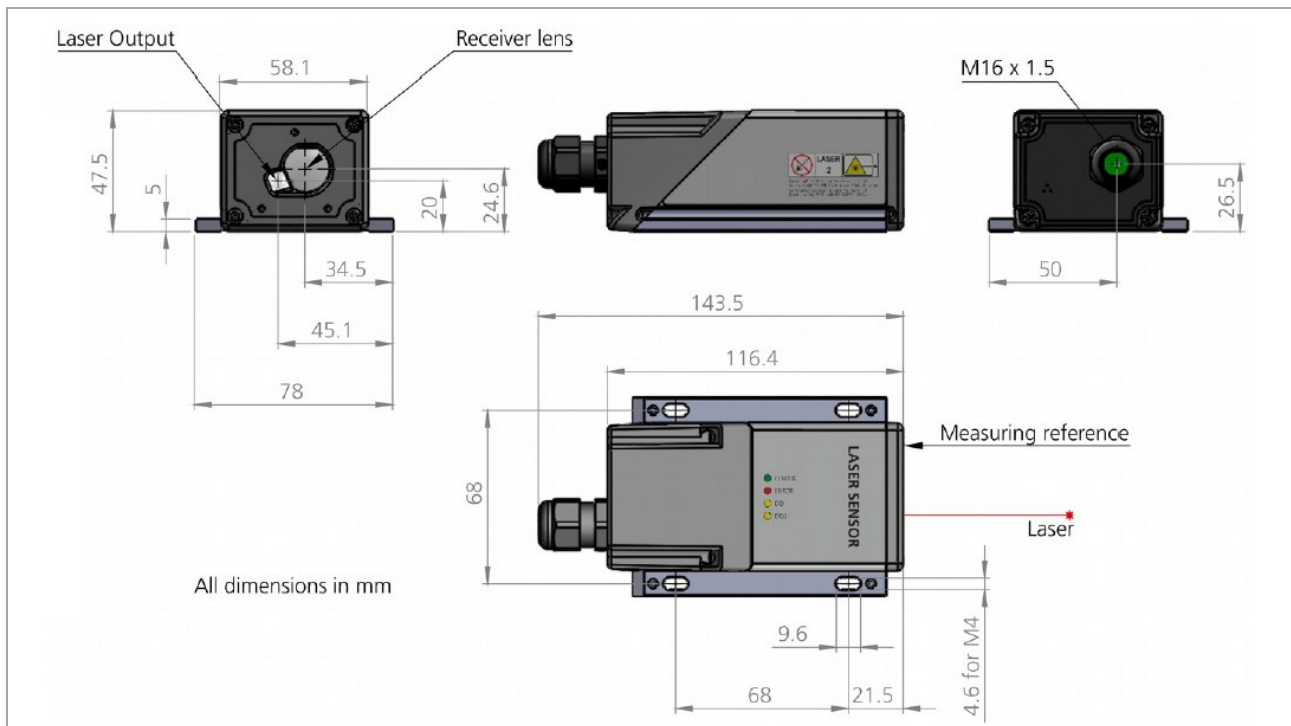
# Distance Sensors - Optical

## DPE-10-500

### Functions

- Automatic mode for stand-alone operation
- Direct connection to an external display
- User distance offset / gain, programmable
- Filter functions, programmable
- Adjustable measuring behaviour
- Programmable device ID
- Trigger functionality

### Dimensions



### Ordering example

**Type** DPE - 10 - 500 - PROFINET

#### Accuracy

**10** =  $\pm 1$  mm [at  $\pm 2 \sigma$ ];  $\pm 0,5$  mm [at  $\pm 1 \sigma$ ]

#### Measuring range

**500** =  $\sim 0,5 \dots 500$  m on reflecting foil;  
 $0,05 \dots \sim 100$  m on natural surfaces

#### Interface (optional)

PROFIBUS (external)

**PROFINET**

EtherNet/IP

EtherCAT

**DIMETIX**  
Manufacturer: LASER DISTANCE SENSORS