



More Precision

opto**CONTROL** CLS1000 // Fiber optic sensor for industrial applications



Controller with voltage output opto**CONTROL** CLS1000-AU

Freely scalable analog output
Voltage from 0 ... 10 V

Analog output as intensity
output

Analog output and switching output



| Model | CLS1000-AU-NPN | CLS1000-AU-PNP | CLS1000-AU-PP | CLS1000-AU-NPN-T | CLS1000-AU-PNP-T | CLS1000-AU-PP-T |
|---------------------------------|---|--|---------------|---|--|-----------------|
| Article number | 10085115 | 10085116 | 10085117 | 10085118 | 10085119 | 10085120 |
| Operating range | max. 2000 mm (depending on transmission sensor) | | | | | |
| Detection range | max. 1200 mm (depending on reflex sensor) | | | | | |
| Response time | 100 μ s | | | | | |
| Switching frequency | 2.5 kHz (depending on pulse/pause ratio) | | | | | |
| Frequency response (-3dB) | 10 kHz | | | | | |
| Temperature stability | $\leq 0.1\%$ FSO / K | | | | | |
| Light source | infrared LED 870 nm | | | | | |
| Permissible ambient light | 50,000 lx | | | | | |
| Supply voltage ¹⁾ | 12 ... 30 VDC | | | | | |
| Max. current consumption | 50 mA | | | | | |
| Analog output | 0 ... 10 V | | | | | |
| Switching output | NPN | PNP | PP | NPN | PNP | PP |
| Switching | light/dark switching (switchable) | | | | | |
| Signal input | - | | | Trigger In | | |
| Connection | Optical | FA socket M18x1 for screwable optical fiber (length 0.3 m ... 15 m, min. bending radius 18 mm) | | | | |
| | Electrical | 4-pin M12 socket for power supply and signals (connection cable see accessories) | | | 5-pin socket M12 for power supply and signals (connection cable see accessories) | |
| Mounting | DIN rail, DIN rail mounting (see accessories), mounting holes | | | | | |
| Temperature range | Storage | -10 ... +70°C | | | | |
| | Operation | -5 ... +55°C | | | | |
| Shock (DIN EN 60068-2-27) | 20 g / 11 ms in 3 axes, two directions and 1000 shocks each | | | | | |
| Vibration (DIN EN 60068-2-6) | 15 g / 10 ... 1000 Hz in 3 axes, 10 cycles each | | | | | |
| Protection class (DIN EN 60529) | IP67 | | | | | |
| Material | Plastic housing (polycarbonate) | | | | | |
| Weight | 200 g | | | | | |
| Compatibility | with all CFS sensors (FAR, FAD, FAZ and FAS) | | | | | |
| Control and indicator elements | Parameterization/operation via membrane keypad and OLED display on controller; LED for power on | | | | | |
| Special features | up to 9 teach-in modes; adjustable switching output functions on-delay and off-delay as well as pulse output adjustable hysteresis 2 ... 25% | | | up to 9 teach-in modes; adjustable switching output functions on-delay and off-delay as well as pulse output adjustable hysteresis 2 ... 25%; variety of trigger types | | |

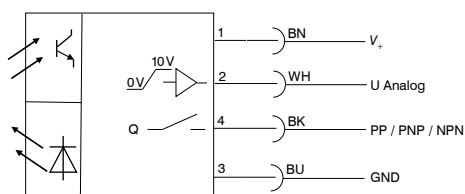
FSO = Full Scale Output

The specified data apply for a consistent room temperature of 22 °C, sensor is continuously in operation, open signal outputs.

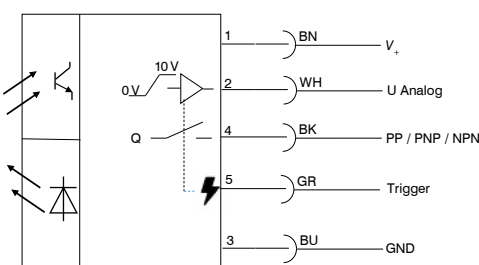
¹⁾ Residual ripple $\leq 10\%$

Connection diagram

CLS1000-AU-xx



CLS1000-AU-xx-T



Accessories

optoCONTROL CLS1000

| Art. no. | Model | Description |
|----------|-------------|---|
| 11245551 | PC1000-2-T | Signal / supply cable, 2 m, 5-pin unshielded |
| 11245300 | PC1000-5-T | Signal / supply cable, 5 m, 5-pin unshielded |
| 11245301 | PC1000-10-T | Signal / supply cable, 10 m, 5-pin unshielded |
| 11245302 | PC1000-2 | Signal / supply cable, 2 m, 4-pin unshielded |
| 11245303 | PC1000-5 | Signal / supply cable, 5 m, 4-pin unshielded |
| 11245304 | PC1000-10 | Signal / supply cable, 10 m, 4-pole unshielded |
| 11245305 | PC1000/90-2 | Signal / supply cable, 2 m, 4-pole unshielded, 90° outlet |
| 11245306 | PC1000/90-5 | Signal / supply cable, 5 m, 4-pin unshielded, 90° outlet |
| 2420096 | PS2031 | Plug-in power supply universal 100 ... 240 V / 24 V / 1 A |
| 2420062 | PS2020 | PS2020 Power supply unit 24 V |
| 10811916 | | Pressure-tight feedthrough for vacuum |