

OF659195

OPTICAL SENSORS • COLOR SENSORS

sensor optical, color, 82x65x65mm, White light, True color, Sn: 50-500, 22-26V DC, 5x PNP/NPN Push-pull, Connector M9 8pin, IP64, Aluminum Anodized+Glass, $\Delta E >= 0.5$, 40kHz, 31 colors



MECHANICAL FEATURES

| Ambient temperature | -20 °C 55 °C |
|---|--------------|
| Degree of protection (IP) | IP64 |
| Degree of protection (IP) of evaluation electronics | IP64 |
| Degree of protection (IP), front side | IP67 |
| For damp environments | + |
| Housing coating | Anodized |
| Housing design | Cuboid |
| Housing material | Aluminum |
| Material of optical surface | Glass |
| Sensor height | 82 mm |
| Sensor length | 65 mm |
| Sensor width | 65 mm |
| Storage temperature | -20 °C 85 °C |

ELECTRICAL FEATURES

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|--|--------------------|
| EMC test in acc. with | DIN EN 60947-5-2 |
| Equipment protection class | Protection class 3 |
| Max. number of measurements for averaging | 32768 |
| Measurement frequency in alternating light operation | 20000 Hz |
| Measurement frequency in constant light operation | 35000 Hz |
| Measurement frequency in flash mode | 5000 Hz |
| No-load current | 160 mA |
| Number of digital inputs | 1 |
| Number of LEDs | 5 |
| Number of pins | 8 |
| Number of pins of the communication interface | 4 |
| Number of switching outputs | 5 |
| Operating voltage | 21.6 V 26.4 V |
| Overload protection | + |
| Pulse stretching (MAX) | 100 ms |
| Rated control supply voltage Us at DC | 21.6 V 26.4 V |
| Rated switching current | 100 mA |
| Reverse polarity protection | + |
| | |



ELECTRICAL FEATURES

| Selectable amplifier stages | 8 |
|--|---|
| Sensing range | 50 mm 500 mm |
| Setting procedure | Parameterization |
| Standard for interfaces | RS-232 |
| Switching frequency | 40000 Hz |
| Temperature drift | $\Delta X/\Delta T$; $\Delta Y/\Delta T$ typ. 0.2 digits/°C (< 0.01% / °C) |
| Type of communication interface | Connector M5 |
| Type of electrical connection | Connector M9 |
| Type of plug-in contact, communication interface | Female (socket) |
| Type of switching function | Push-pull |
| Type of switching output | PNP/NPN |
| Voltage type | DC |
| With communication interface, RS-232 | + |
| With external teach | + |
| With external trigger | + |
| With LED display | + |
| With time function | + |

OPTICAL FEATURES

| Measuring method for color detection | Active tristimulus method |
|--------------------------------------|---------------------------|
| Light source | White light |
| Light spot | 490.87 mm² |
| Nominal sensing range | 200 mm |
| Light spot diameter | 25 mm |
| True color | + |
| Max. ambient light | 5000 lx |
| Alternating light operation | + |
| Constant light operation | + |
| Flash mode | + |
| Color distance | ΔE >= 0.5 |
| Color spaces | X Y INT siM (Lab) |

Other

| Packaging dimensions | 138.0mm x 95.0mm x 210mm |
|----------------------|--------------------------|
| Shipping weight | 0.45kg |
| Tariff code | 85365019 |

Classification

| ipf product group | 104 |
|-------------------|----------|
| eClass 8.0 | 27270907 |
| eClass 9.0 | 27270907 |
| eClass 9.1 | 27270907 |
| ETIM-5.0 | EC001817 |
| ETIM-6.0 | EC001817 |
| ETIM-7.0 | EC001817 |



Connection

supply / signals brown 2 green ext. input programming connection vellow PNP NO / NC programmable gray PNP NO NC programmable RxD pink / NC programmable blue PNP NO 8 PNP NO / NC programmable white

Dimensional drawing

Installation



Mounting / installation may only be carried out by a qualified electrician!

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Disposal



Software

Any software, drivers or IODD files that may be required to operate your device can be downloaded free of charge from our homepage: www.ipf-electronic.com

Safety warnings

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information.

Never use these devices in applications where the safety of a person depends on their functionality.

LED lighting systems can generate intensive UV radiation, which can damage your eyes in case of improper use. The manufacturer cannot be held responsible for damages that result from improper use or connection.