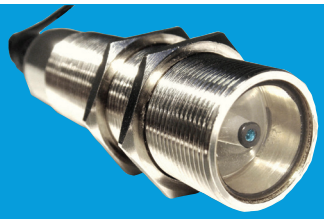
# COLOR SENSOR

SELECTION GUIDE

## ColorMax



| | | CM1000-1-4 | CM1000-4-4 | CM1000-7-4 | CM1000-15 HEX4 | CM1000-4-RGB4 | CM1000-FLEX4 | CM1000-1-8 | CM1000-4-8 | CM1000-7-8 | CM1000-15 HEX8 | CM1000-4-RGB8 | CM1000-FLEX8 | CM1000-7-25 | CM1000-15 HEX25 | CM1000-4-RGB25 | CM1000-FLEX25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **LIGHT SOURCE** | White LED 400…700 nm | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **SPOT DIA. @ 50 mm** | 4 mm | • | • | • | • | • | • | | | | | | | | | | |
| | 8 mm | | | | | | | • | • | • | • | • | • | | | | |
| | 25 mm | | | | | | | | | | | | | • | • | • | • |
| **RECEIVER** | RGB photodiode | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **SENSING RANGE** | 30 mm…100 mm | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **RECOMMENDED SENSING DISTANCE** | 50 mm | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **COLOR RECOGNITION CHANNELS** | 1 | • | | | | | | • | | | | | | | | | |
| | 4 | | • | | | • | • | | • | | | • | • | | | • | • |
| | 7 | | | • | | | | | | • | | | | • | | | |
| | 15 | | | | • | | | | | | • | | | | • | | |
| **COLOR RECOGNITION DISCRETE OUTPUTS** | 1 | • | | | | | | • | | | | | | | | | |
| | 4 | | • | | | • | • | | • | | | • | • | | | • | • |
| | 7 | | | • | | | | | | • | | | | • | | | |
| | 15 (4 binary coded discrete outputs) | | | | • | | | | | | • | | | | • | | |
| **RGB ANALOG OUTPUTS** | Red (0-5V), Green (0-5V), Blue (0-5V) | | | | | • | • | | | | | • | • | | | • | • |
| **DISCRETE OUTPUTS** | Programmable NPN/PNP | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **CURRENT (MAX.)** | 100 ma | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **VOLTAGE (MAX.)** | Sensor V+ | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **PROTECTION** | Short-circuit, transient, EMI | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **MIN. PULSE DURATION (ms)** | 0, 10, 20…100 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **RESPONSE TIME (us)** | 330 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **SWITCHING FREQUENCY** | 20 kHz | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **INDICATOR** | Red – channel match | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| | Green – power, no channel match | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| | Amber - teaching | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **CONTROLS** | PC Application program | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **COMMUNICATIONS** | RS-232C/USB | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **DATA LOGGING** | PC Application program | | | | | | • | | | | | | | | | | • |
| **COMMUNICATIONS PROTOCOL** | | | | | • | • | • | | | | • | • | • | | • | • | • |
| **EXTERNAL TRIGGER INPUT** | Sensor V+ (12…30 VDC @ 5 mA) | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **DATA TRANSMISSION** | RS-232C/USB | | | | | | • | | | | | | | | | | • |
| **POWER** | 12…30 VDC @ 100 mA (max.) | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **PROTECTION** | Reverse polarity, over current (PTC fuse) | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **DIMENSIONS (LENGTH X DIA.)** | 120 mm x 30 mm (4.7” x 1.25”) | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **WEIGHT** | 180 g (.4 lbs.) | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **HOUSING MATERIAL** | 316 stainless steel | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **TYPE OF PROTECTION** | IP67 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **OPERATING TEMPERATURE** | -10…55°C | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **STORAGE TEMPERATURE** | -20…70°C | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| **I/O CONNECTOR** | Circular M12, 12 pin, IP67 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • |

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