

Photoelectrics Diffuse-Reflective Type CGPS-UR, DC, Plastic Housing

CARLO GAVAZZI



- Ultra short body length
- 100 & 300 mm sensing range
- Dual output – NO & NC in single unit
- Supply Voltage: 10 to 30 VDC
- Cable and plug versions
- IP66
- CE marked, UL and cUL approved

Product Description

The CGPS-UR... is a family of cost-effective general purpose diffuse photoelectric sensors in a compact and versatile 18mm housing. They are useful for simple applications where a basic sensor provides adequate sensing performance, or for applications requiring a compact sensor with exceptional sensing range. The sensors are simple to use and easy to install. The sensors have both Normally open and Normally closed outputs, making them versatile for any installation.

Ordering Key

CGPS-UR-10N-M8

Type _____
Mode _____
Sensing Distance _____
Output _____
Connection _____

Type Selection

Housing Diameter	Sensing Distance	Output N.O. & N.C.	2 m cable	M8 Connector	M8 Connector w/lead
M18	100 mm	NPN	CGPS-UR-10N	CGPS-UR-10N-M8	CGPS-UR-10N-PG
M18	100 mm	PNP	CGPS-UR-10P	CGPS-UR-10P-M8	CGPS-UR-10P-PG
M18	300 mm	NPN	CGPS-UR-30N	CGPS-UR-30N-M8	CGPS-UR-30N-PG
M18	300 mm	PNP	CGPS-UR-30P	CGPS-UR-30P-M8	CGPS-UR-30P-PG

Specifications

Sensing Distance (S_n) Adjustable	100 mm & 300 mm	Ambient Light Immunity	Lamplight < 10, 000 Lux Sunlight < 20, 000 Lux
Sensitivity Adjustment	270° Potentiometer	Response Time Operating Frequency	1 ms 1 KHz
Rated Operational Voltage (U_B)	10 - 30 VDC	Output indication (LED functions)	Green: Power ON Yellow: Output ON
Ripple (U_{rpp})	< 20%	Environment Overvoltage Category Pollution degree Degree of protect	III 3 IP 66
Output Current	150 mA maximum	Operating Temperature	-20 °C - to +80 °C; -4F to +176F 35% - 85% RH
No Load Supply Current (I_O)	< 30 mA		

Leakage Current	0.8 mA Maximum	Housing Lens	Intensive PBT PMMA
Residual Voltage	0.1 V Maximum	Connection Cable Plug Pig-tail	2m M8 x 1 M8 Plug w / 6" Cable
Protection	Short Circuit, Reverse Polarity		
Transient Voltage	2 kV / 1μ s	Mating Cable M8 plug	CONG5A - .. series
Light Source	Infrared LED	Weight Cable version M12 M8 plug version	85 g 25 g 20 g
Dielectric Voltage	2.5 kV	Approvals	UL, cUL, CE

Diagram of a dual inverter module circuit. The module contains an NPN transistor and a PNP transistor. The NPN transistor has a 4.7K resistor on its base and a 3.9K resistor on its emitter. The PNP transistor has a 3.9K resistor on its base and a 4.7K resistor on its emitter. The module is connected to a 10~30VDC source (Brown wire 1) and ground (Blue wire 4). The NPN output (White wire 2) is connected to a Load. The PNP output (Black wire 3) is connected to a Load.

Pin1: +v Brown
Pin2: N.C. Output White
Pin4: N.O. Output Black
Pin3: 0v Blue

Lead wire	M8 Lead wire	M8 Connector

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Other Information:

Accessories:	CONM54NF-... for models with M8 plug
Delivery Contents:	• Photoelectric sensor • 1 nut • 1 mounting bracket • 1 screwdriver (on models with adjustable sensitivity)
Compliance/Approvals:	  