CT-N-CL420 Series Specification

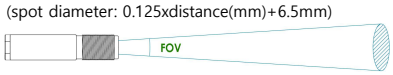
Infrared Temperature Sensor with Analogue Output

Features

- Temperature measuring ranges from -20℃ to *(100℃, 200℃, 300℃)
- Spectral range: 8...14㎛
- Operating Voltage: DC 20...30VDC
- Output of standard 4 to 20mA DC
- Field of View(FOV): **about 7°
- Fixed emissivity 0.97 for measuring non-reflective non-metals,
- ***Accuracy ±2% of reading or ±2℃, whichever is greater @25℃
- Maximum load resistance 300Ω at Power Supply 24V
- IR refresh rate: 10Hz
- operating temperature: -20℃ to 70℃

* See ordering guide.

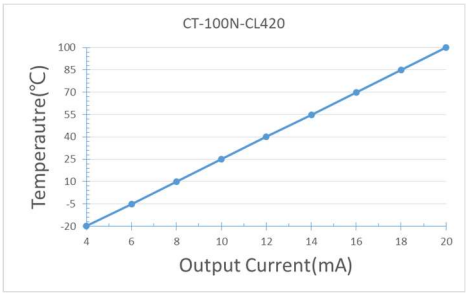
** : 7° (spot diameter: 0.125xdistance(mm)+6.5mm)



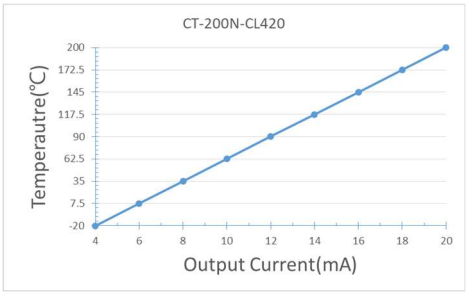
***: Accuracy is only effective if the object is fully covered by the sensor's FOV and applicable to stable temperature conditions.

Output Current vs Temperature

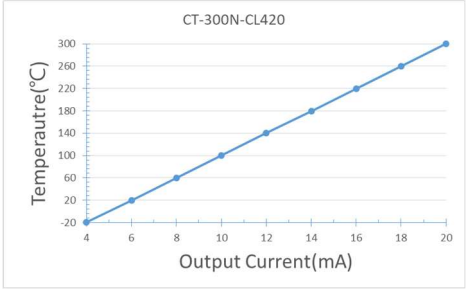
- CT-100N-CL420



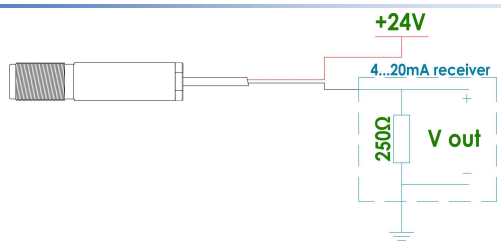
- CT-200N-CL420



- CT-300N-CL420

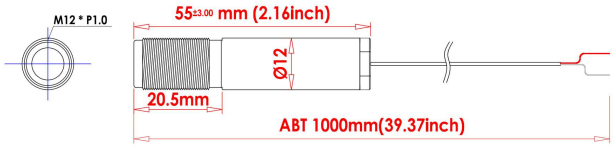


Connections



Dimensions / Pins and Wiring colors

unit: mm



Dimensions: Ø12 x 55mm(long)

Thread Mounting: M12 x 1mm pitch

Cable length: about 1m (39.37 inch), Weight with cable: 36g

No.	Wire Color	Description	AWG
1	K (red)	Input DC +24V	24
2	L (white or black)	I out	24

Ordering Guide

CT - □N – CL420

Temp. code	Measurement range	FOV (field of view)
100	-20 ... 100℃	7°
200	-20 ... 200℃	7°
300	-20 ... 300℃	7°

Accessories

	Mounting nut (included)	2pcs
	Protective cap (Remove when using)	1pc

Additional information

Manufacturer: DIWELL Electronics Co., Ltd. (South Korea)

Quotation request : sale01@diwell.com, sale02@diwell.com

Technical support: tech01@diwell.com, dsjeong@diwell.com

Revision history

Version	Date(Y,M,D)	Description
1.0.0	2023.11.20.	First version is released
1.0.1	2024.1.12	CT-300N-CL420 FOV changed(7.16°)
1.0.2	2025.11.04	FOV change(7°)