

iSN-812-MTCP/iSN-813-MTCP
iSN-811C-MTCP/iSN-813-MRTU

IR temperature sensing module

Features

- Non-contact temperature measurement
- Modbus RTU protocol support for the iSN-81x-MRTU series
- Modbus TCP, RESTful, and MQTT protocol support for the iSN-81x-MTCP series
- Web-based configuration and monitoring interface for the iSN-81x-MTCP series
- Temperature threshold alarm function Integrated thermal imaging and field imaging

Introduction

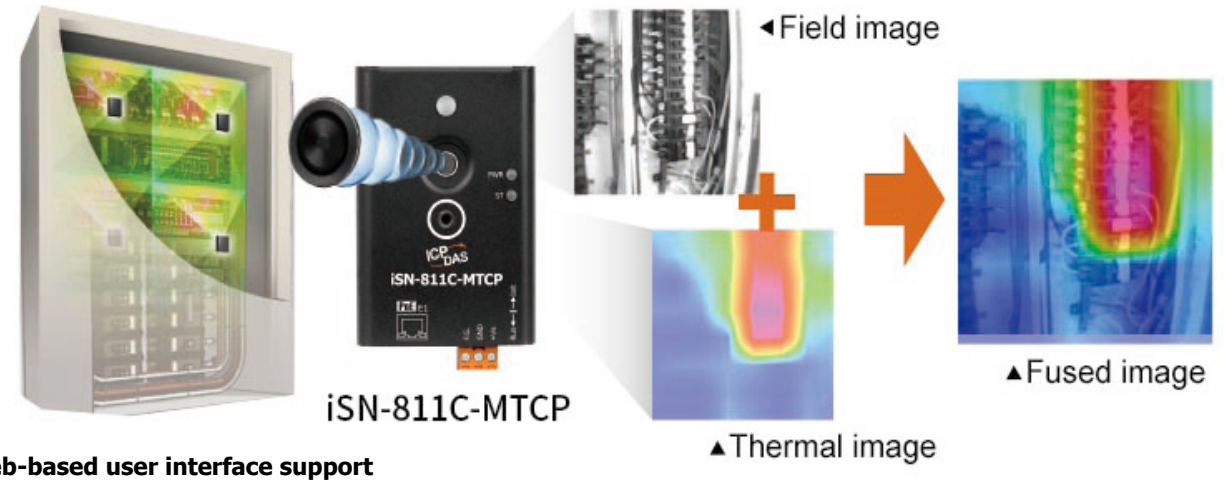
The iSN-81x-MRTU and iSN-81x-MTCP series are non-contact infrared temperature sensing modules that integrate infrared and visible light imaging technologies, providing precise and reliable temperature monitoring solutions for industrial equipment.

Non-Contact Temperature Measurement

Using infrared technology, temperature can be accurately measured without direct contact with the object, making it particularly suitable for high-temperature, moving, or hard-to-reach objects, ensuring the safety of operators.

Combination of Temperature and Imaging

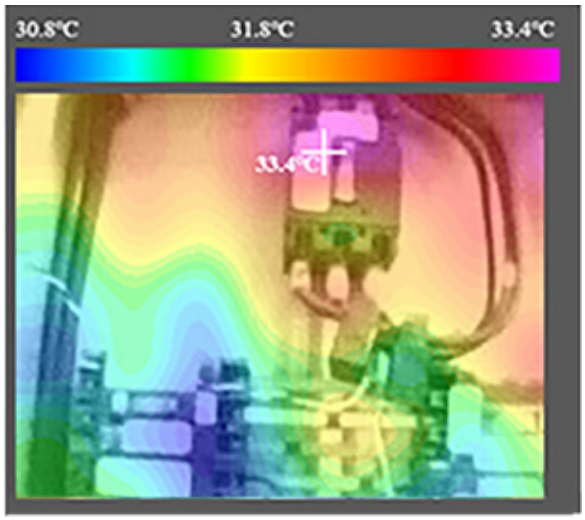
With a built-in camera, infrared images are combined with visible light images, allowing managers to clearly understand the temperature distribution of equipment and intuitively analyze abnormal conditions.

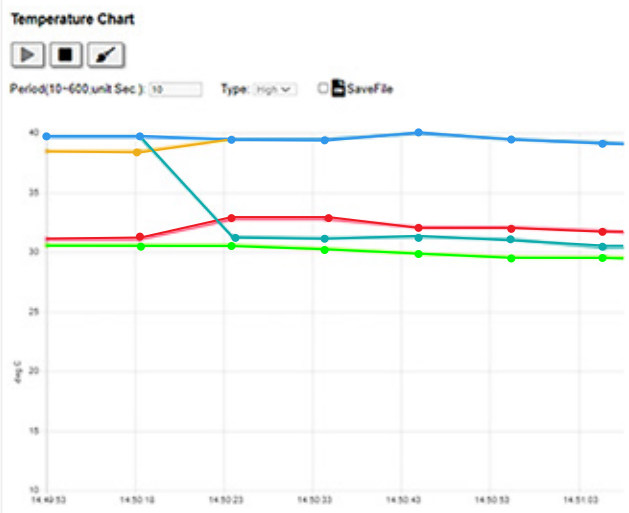


Web-based user interface support

The iSN-81x-MTCP features a built-in web interface, allowing for easy module configuration and the viewing of temperature and imaging data.

HeatMap: Integrated thermal imaging and field imaging	Chart: Monitor and record temperature trends





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Applications

- **Supports Modbus / MQTT / RESTful Communication Protocols**

Modbus **Industrial Standards** **Local Area Network** **Centralized Management**



MQTT **IOT Standards** **Proactive Sending** **Distributed management**

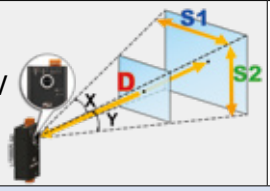


Cross-platform Applications **Distributed Management**



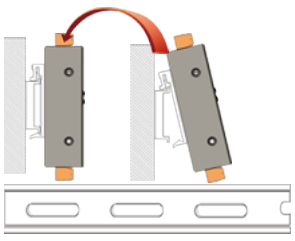
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System Specifications

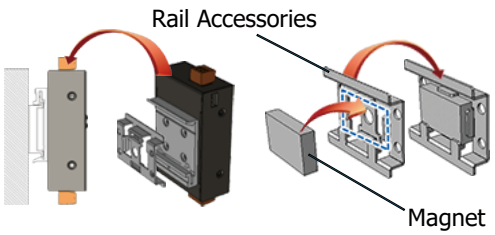
Model	iSN-812-MRTU	iSN-811C-MTCP	iSN-812-MTCP	iSN-813-MTCP
Interface				
Ports	RS-485	Ethernet, IEEE 802.3af,Class 1		
Protocol	Modbus RTU	Modbus TCP / MQTT / RESTful		
Temperature Measurement				
Range	-40° C ~ 300° C	-20° C ~ 250° C	-40° C ~ 300° C	-20° ~ 300° C
Accuracy	±5°C Max.			
Resolution	0.1°C			
Pixels	768 (32 x 24)	64 (8 x 8)	768 (32 x 24)	4800 (60 x 80)
Recommended Distance	≦ 2M	≦ 1M	≦ 2M	≦ 6M
FOV 	**X:** 110° D : S1=1 : 2.86 **Y:**75° D : S2 =1 : 1.53	**X:** 60° D : S1 =1 : 1.15 **Y:** 60° D : S2 =1 : 1.15	**X:** 110° D : S1 =1 : 2.86 **Y:** 75° D : S2 =1 : 1.53	**X:** 90° D : S 1=1 : 2 **Y:** 67° D : S 2=1 : 1.32
Motion picture (camera)				
Pixels	-	QVGA (320 x 240)	-	-
Fill light	-	Yes	-	-
Power				
Input Range	+10 ~ +30 VDC			
Consumption	0.9W	1.2W	0.6W	1W
Mechanical				
Installation	Din-rail or magnetic(Optional), universal joint(Optional)			
Dimensions (mm)	52 x 94 x 34 (W x H x D)	52 x 86 x 34 (W x H x D)		
Environment				
Operating Temperature	-10 ~ +70°C			
Storage Temperature	-20 ~ +80°C			
Humidity	10% ~ 95% RH, Non-condensing			

Various installation options for various fields

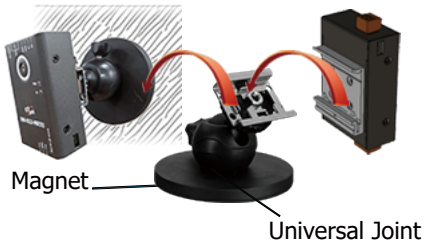
Rail Mounting



Magnetic Mounting



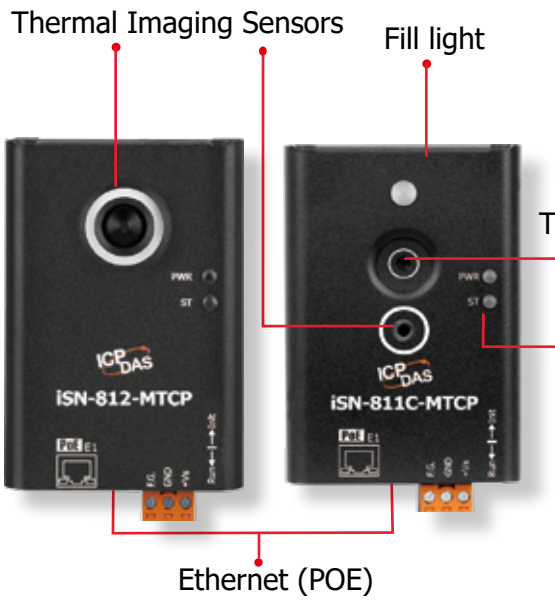
Universal Holder



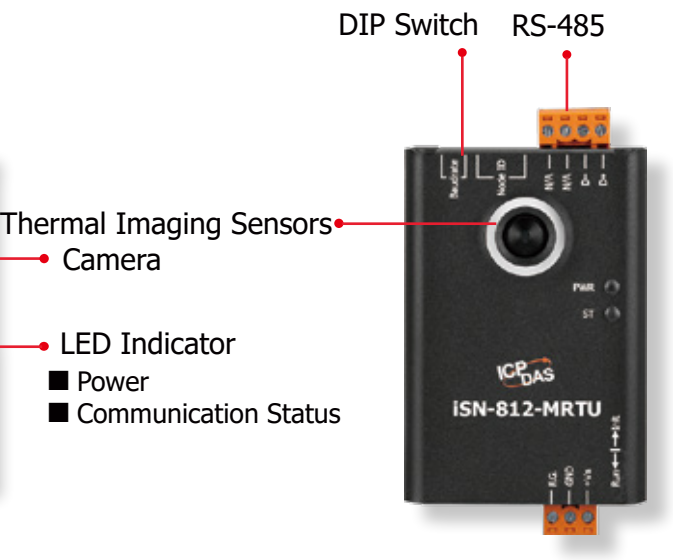
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Pin Assignments

- iSN-81X-MTCP

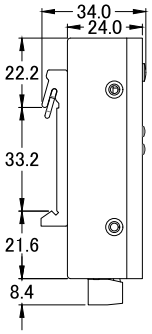


- iSN-81X-MRTU

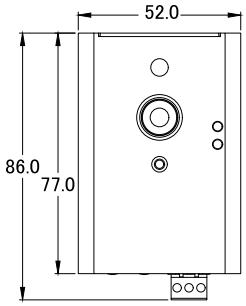


Dimensions (Units: mm)

- iSN-811C-MTCP

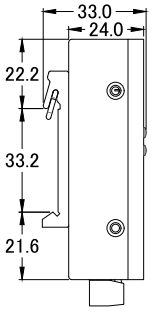


Left View

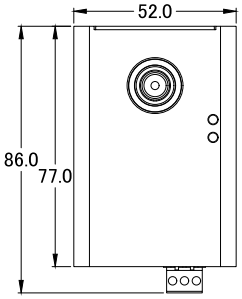


Front View

- iSN-812-MTCP/iSN-813-MTCP

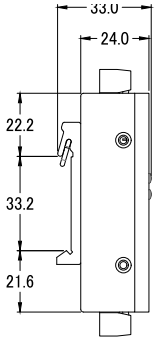


Left View

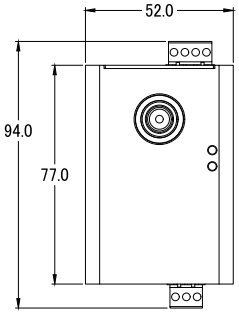


Front View

- iSN-812-MRTU



Left View



Front View

Accessories

ASO-0054 CR	ASO-0060 CR	WM01-M CR
 Universal Joint Bracket(RoHS)	 Magnetic Base Universal Joint Bracket(RoHS)	 44 mm Magnetic Mounting Kit(RoHS)

Ordering Information

iSN-811C-MTCP CR	Modbus TCP; IR temperature sensing module with camera; 64 Pixels (RoHS)
iSN-812-MTCP CR	Modbus TCP; IR temperature sensing module; 768 Pixels (RoHS)
iSN-812-MRTU CR	Modbus RTU; IR temperature sensing module; 768 Pixels (RoHS)
iSN-813-MTCP CR	Modbus TCP; IR temperature sensing module; 4800 Pixels (RoHS)

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