**PSGMT490 On-line double optical temperature measuring imager**

**Technical specification**

1. Overview of the system

PSGMT490 double-spectrum imager is a double-spectrum T-type high-speed imager, equipped with infrared thermal imaging and high-definition visible light, small size, light weight, wide monitoring range, can be installed on mobile robots, widely used in substations, power distribution rooms, factory inspection and other scenes.



1. **Product feature**

* real-time infrared image display, target temperature measurement;
* Compatible with a variety of optical lenses, suitable for more applications;
* Wide temperature range, up to 1600℃;
* High temperature measurement accuracy, up to ±2℃;
* The use of three closed loop control system, with a wide speed dynamic range, large angular acceleration;
* support wireless data transmission;
* T type double bin load form, compact structure, small size;
* dual optical fusion target detection and positioning, accurate target positioning;
* with position locking function, external disturbance can be quickly recovered;
* Support 12VDC, 24VDC, 24VAC power supply;
* IP67 protection grade, built-in 4000V lightning, surge and surge protection.

1. **Function**

* Self-test function: automatic self-test on power-on, enter the working mode after the completion of self-test;
* Basic motion function: manual control multi-stage speed adjustable;
* Number of preset bits: 255 preset bits. Positioning function: absolute Angle positioning;
* Scanning mode: preset bit by point scanning, adjustable preset bit residence time, adjustable scanning speed;
* with position holding function, abnormal external interference caused by offset can be quickly restored;
* dual optical real-time image display function, can display visible and infrared real-time video at the same time;
* Observe the target temperature measurement function, can measure the target temperature through infrared thermal imaging;
* temperature anomaly alarm, temperature anomaly location function;

1. **Main technical indicators**

Table 1

Main technical indexes of online dual-optical temperature measuring head

|  |  |  |
| --- | --- | --- |
| serial number | Technical index item | index parameter |
| 1 | Infrared detector type | Uncooled focal plane detector |
| 2 | Resolution | 640×512、384×288 |
| 3 | Optical focal length | 8mm、12mm、13mm、19mmm、25mm（optional） |
| 4 | Temperature range | -20℃~500℃ (can be extended to 1600℃) |
| 5 | Temperature measurement accuracy | ±2℃ or 2% |
| 6 | Visible light detector type | 1/2.8” CMOS |
| 7 | Visible light resolution | 200W, 300W, 500W, etc. (optional) |
| 8 | Visible focal length | f = 6.1 ~ 317.0mm, 52 times optical zoom (optional) |
| 9 | Head type | Double T load |
| 10 | Transmission form | Precise spur gear drive |
| 11 | Rotation range | Horizontal 360° continuous rotation, pitch ±90° |
| 12 | Rotational speed | Level 0.1~50°/s, pitch 0.1~50°/s |
| 13 | Repeated positioning accuracy | ±0.15 |
| 14 | Remote upgrade | At the same time support model and PTZ remote upgrade |
| 15 | Communication protocol | PECLO+VISCA |
| 16 | Automatic cruise | Support, focal length and PTZ speed matching, 8 cruise scan |
| 17 | Real-time Angle return | Supports real-time Angle return or query Angle return |
| 18 | Preset point \ cruise line | Supports 255 preset bits |
| 19 | Electromagnetic compatibility | Meet the requirements of GB/T 17626 |
| 20 | Communication interface | 1 Adaptive RJ45 Ethernet port |
| 21 | RS485 controller interface | Supports adaptive Pelco-P and Pelco-D protocols. The baud rate can be 2400, 4800, 9600, or 19200 |
| 22 | External input | Two alarm inputs |
| 23 | Output port | 2 alarm outputs /1 relay outputs |
| 24 | Application programming interface | Supports ONVIF2.0 and GD28181 protocols, and supports SDK and third-party platform access |
| 25 | Power supply range | DC12V, 5.0A/DC24V, 6A |
| 26 | Power dissipation | ≤88W (Min.) /≤140W(infrared light ON, low temperature start) |
| 27 | dimension | L490.0mm x W205.0mm x H350mm(both sides) |
| 28 | weight | 10kg |
| 29 | Operating ambient temperature | - 40 ℃ ~ + 60 ℃ |
| 30 | Working ambient humidity | 0 ~ 95% (no condensation) |
| 31 | Class of protection | IP67, built-in 4000V lightning protection, surge protection and surge protection |

1. **Outline size drawing**

