

ERUSTM64-9

640 x 512 Radiometric Thermal Module

Platform model: ST-M06-G21

Uncooled LWIR Radiometric Thermal Module - 9.1 mm F1.0, Temperature Measurement

The ERUSTM64-9 (platform model ST-M06-G21) is a 640 x 512 uncooled radiometric thermal module with on-board temperature measurement. In addition to thermal imaging it outputs full-screen temperature matrices and supports spot, area and isotherm measurement, making it suitable for predictive maintenance, industrial inspection and fire-prevention monitoring where temperature data - not just pictures - is required.

The module pairs a 12 μ m VOx detector with a 9.1 mm F1.0 athermal lens for a 48.3 deg x 38.7 deg field of

KEY SPECIFICATIONS AT A GLANCE

Temperature range: -20 to 150 C / 0 to 550 C, accuracy +/- 2 C or +/- 2%

Field of view: 48.3 deg x 38.7 deg (9.1 mm F1.0)

Radiometric output: Full-screen temperature matrix, spot and area measurement, isotherm

TECHNICAL SPECIFICATIONS

Detector type	VOx uncooled infrared focal plane array
Resolution	640 x 512
Pixel pitch	12 μ m
Spectral response band	8 - 14 μ m (LWIR)
NETD	$\leq$ 30 mK @ F1.0, 25 C
Frame rate	30 Hz
Focal length	9.1 mm
F-number	F1.0
Field of view (H x V)	48.3 deg x 38.7 deg
Pseudo-colour modes	White Hot / Lava / Iron Red / Hot Iron / Medical / Arctic / Rainbow 1 / Rainbow 2 / Red Outline / Black Hot
Digital video interface	Type-C
Temperature measurement range	-20 C to 150 C 0 C to 550 C
Temperature measurement accuracy	+/- 2 C or +/- 2% (measuring distance 5 m)
Area temperature measurement	Arbitrary area - outputs maximum, minimum and average temperature of the selected area
Spot temperature measurement	Supported
Isotherm	Supported
Full-screen temperature measurement	Supports full temperature matrix output
Supply voltage range	4.2 - 5.5 V
Power consumption	0.5 W @ 4.2 V @ 23 +/- 3 C
Operating temperature	-40 C to +70 C
Storage temperature	-45 C to +85 C
External dimensions	21 mm x 21 mm x 29.47 mm
Weight	22.1 g
Technical support	Customisation to application requirements; system training available for customer technical staff and operators
After-sales service	Independently developed product with equipment maintenance, repair and after-sales support

TYPICAL APPLICATIONS

Predictive maintenance and electrical inspection, industrial process monitoring, fire-prevention and early fire detection, radiometric research and thermography. OEM/ODM integration into inspection instruments