KT100 INDUSTRIAL MONITOR SYSTEM

FEATURES

- Dual thermal and visual camera
- Secure connection to Kintronics Cloud
- I/O connections enable external sensors
- Low power consumption
- Optional connection to SCADA/GIS and asset management applications

The KT100 Industrial module monitors and collects asset health data from remote sites. Thermal monitoring mitigates the risks of failure from overheating assets and connection points. Analytics detect anomalies and provide automatic warnings. The visual camera provides situational awareness in remote locations.
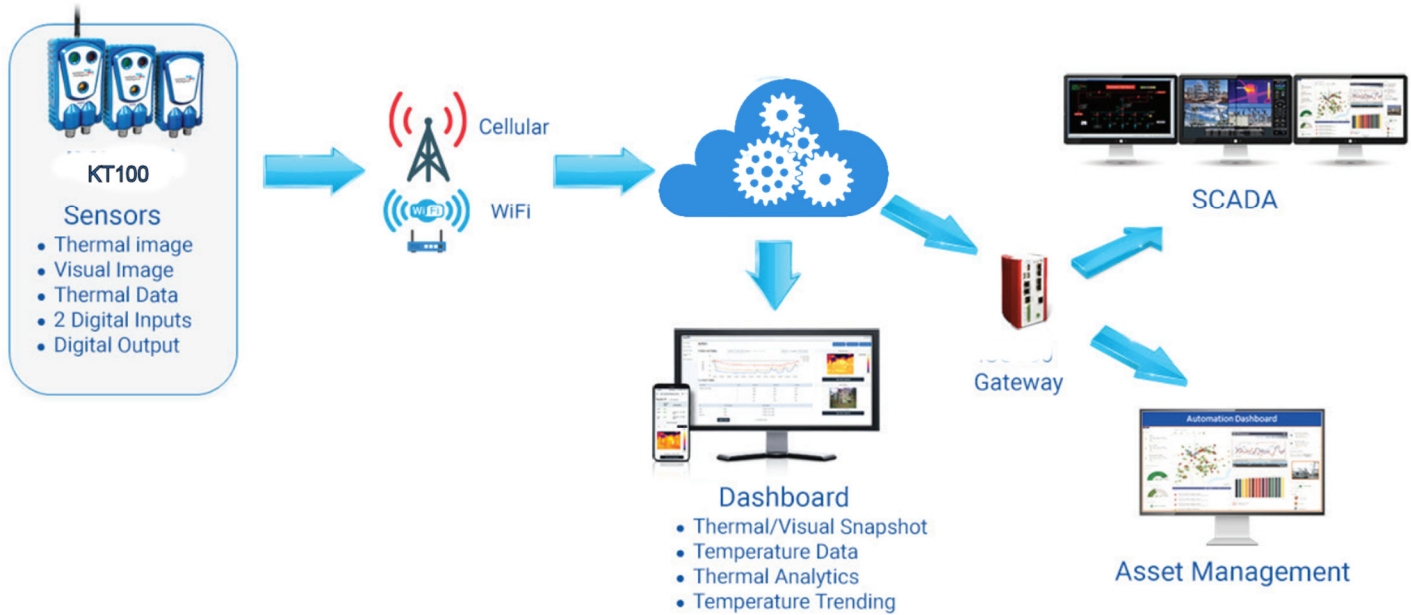
KEY BENEFITS

- High-reliability operation in extreme environments, low maintenance costs
- Simple to install and maintain
- Early detection of heat, flooding, tampering, etc., to prevent failures and outages
- Analytics provide real-time operator alerts
- Optimized data usage with adjustable polling rates

With externally connected sensors, the KT100 can enable flood warnings and other safety, environmental, and quality monitoring. Signals are transmitted securely from the device to a dashboard on a phone, laptop, or other platform. Remote updates ensure the firmware is current and enable customization of the devices.

www.kintronics.com

INDUSTRIAL SENSOR ARCHITECTURE

KT100

Sensors
- Thermal image
- Visual Image
- Thermal Data
- 2 Digital Inputs
- Digital Output

Cellular

WiFi

SCADA

Gateway

Dashboard
- Thermal/Visual Snapshot
- Temperature Data
- Thermal Analytics
- Temperature Trending

Asset Management

DASHBOARD

- Monitor the site and control the remote sensor module
- Thermal trending of monitored assets
- Thermal and visual snapshots
- Configure thermal analytics and alarms

CONNECTED SENSORS

- Onboard I/O allows connection of external sensors
- Monitor water level, door closures, temperature etc.
- Adjust polling rates

COMMUNICATION

- Cellular wireless communications
- Secure encrypted WiFi connection to SWI cloud

UTILITY GRADE

- Designed for the harsh conditions found in electric power environments
- Immune to the effects of EMI, ESD and voltage surges and interrupts

Dashboard example

TECHNICAL SPECIFICATIONS

IM MODEL SPECIFICATIONS

THERMAL

Resolution	160 x 120 pixels
Detector Type	Uncooled Vox Microbolometer
Spectral range	8 to 14 μm
Field of View (H)	57°

VISUAL CAMERA

Resolution	800 x 600 pixels
Sensor	1/4" CMOS
Field of View (H)	54°
FLASH Light	LED, pulsed

NETWORK

Network Options	• Cellular LTE-M or LTE CAT1 • WiFi IEEE 802.11 b/g/n
Software interface	SWI IoT Cloud
Camera Snapshot	Scheduled or Alarm triggered
Thermal reporting	Thermal box comparison Absolute temperature trigger
Thermal analytics	Up to 15m (49 ft) with 0.3 x 0.3m (1 x 1 ft) target
Others	IO control, Email, Map (location), Historical alarms, Camera Setup
DNP3 (optional)	via SWI ClouDNP setup

IO

Digitial Input	2 - wet contact (12VDC)
Solid State Relay	1 - 30VDC, 500mA

POWER

Vin	12VDC nominal (9 to 14VDC)
Power consumption	~1W nominal (no flash)
Power Supply requirement	at least 5W per device

ENVIRONMENTAL

IP Rating	IP67
Op. Temp	-15°C to 70°C
Storage Temp	-40°C to 85°C

MECHANICAL

Dimensions	78.5mm x 126.5mm x 1.45 mm
Enclosure	UV resistant Plastic
Connector	M12 - 4 pin Power input M12 - 8 pin IO

DIMENSIONS Unit: inches (mm)

FEMALE SMA CONNECTOR FOR EXTERNAL ANTENNA SHOWN
FOR XX OPTION, INTERNAL ANTENNA, FEMALE SMA CONNECTOR NOT PROVIDED.

INDICATOR

VISUAL CAMERA
INFRARED SENSOR
LED LAMP

IM500

CONFIG

MOUNTING HOLE
1/4-20 UNC THREAD

CIRCULAR CONNECTOR
M12 A CODE 4 POSITION

CIRCULAR CONNECTOR
M12 A CODE 8 POSITION