DATASHEET:

AMTRON VMD DI 20102

PRODUCT SUMMARY

The Delta Integrated DI 20102 is an AMTRON Anti Tamper Valve Monitoring Device (VMD) fitted with a specially designed battery powered edge device.

The 20102 revolutionizes Anti Tamper Monitoring with instantaneous communication across a vast range of complex industrial environments.

It is guaranteed 1 year of battery life using the default transmission settings based on FM requirements.

The 20102 employs SNAP OS, the industry's first internet-enabled, wireless mesh network operating system, into the microcontroller with an integrated transceiver that delivers up to 2M-bits/sec.

SNAP OS on-board Python interpreter provides rapid application development and over-the-air programming, while Atmel's low-power RF single-chip design saves board space and lowers power consumption.

The modules provide up to 16 channels of operation in the ISM 2.4GHz frequency band.
By default, the 10102 operating system automatically forms a mesh network with other nodes immediately on receiving power. No further configuration is necessary.

BENEFITS AT A GLANCE

- A complete cost-effective valve monitoring IOT solution ideal for monitoring a single valve or hundreds across a site
- Transmit Power output up to +20 dBm
- Shock resistant
- UV Resistant
- High impact resistant
- CLASS A Anti-Tamper protection
- SNAP mesh enabled (2.4GHz, IEEE 802.15.4)
- RF Data rate up to 2Mbps
- Powerful processing to manage the data to and from the inputs and outputs at high speeds
- Self-healing mesh network
- The Amtron VMD unit is a flame retardant, hermetically sealed IP 67 rated unit suitable for indoor and outdoor applications

DELTA INTEGRATED SYSTEMS / Unit 4/44 Devlan Street, Mansfield Queensland 4122 Australia
Free call : 1800 335 823 473 / Email: sales@deltafire.com.au / Web: www.deltafire.com.au

DATASHEET:
AMTRON VMD 20102

COMPLIANCE

Amtron Device:

- National Construction Code (NCC) - Volume One Specification E1.5 Anti-tam devices
- AS4118.1.4 Fire Sprinkler Systems—Class A monitoring devices
- AS2118.1 Automatic Fire Sprinkler Systems—Class A monitoring devices
- AS2419.1 Fire Hydrant Installations
- AS 1851.1 Maintenance of Fire Protection Systems & Equipment

Delta Integrated Device:

- ACMA Radiocommunication (Low Interference Potential Devices) Compliant
- SNAP mesh enabled (2.4GHz, IEEE 802.15.4)

APPLICATIONS

Remotely monitoring a wide range of Valves including but not limited to:

- OS&Y (gate)
- Butterfly (BFV)
- Ball
- Post Indication Valve (PIV)
- Non-Rising Spindle (NRS)
- Sluice Valves

SPECIFICATION

Electrical rating

- 21V—30V dc/ac. 200mA

Weight 230g

Dimensions

- 5.8 cm (L) x 4.4 cm (W) x 10.6 cm (H)
- 2.3” (L) x 1.732” (W) x 4.173 (H)

Mounting

- Easy fit bracketing available for all types of valves

PRINCIPLES OF OPERATION

The DI 20102 operates using the SNAP Mesh Network. This innovative and secure technology ensures stable and near instantaneous network communications. In the event that the direct route of communication between units is broken the mesh can reroute communications to ensure continued communication.

CERTIFICATION

- Certificate of Conformity from SCIRO ActivFire Scheme complying with the NCC Acceptance of Design and Construction Part A2.2 Evidence of suitability.
- Certification of Electrical Equipment for Hazardous Areas (IP65/67 Class 1 Zone 0) under the provisions of the Standards Australia Hazardous Area Certification Scheme. Issued by Londonderry Occupational Safety Centre.
- FFC Part 15.247, FCC ID: U90-SM220
- Industry Canada (IC), 7084A-SM220
- Pending FM Approval as part of a Complete system under FM 3135 Sprinkler Valve Supervisory Devices Approval Standard