MINE SITE TECHNOLOGIES

IMPACT

The FUTURE of mining communications

**Intrinsically Safe
Wireless Network Switch**

Productivity and Safety through Mine-Spec digital applications

Remote monitoring and equipment control
Handeld and portable device data transfer
IP Telephony
Remote video, fixed and mobile

ImPact
The FUTURE of mining communications

I.S. Wireless Network Switch Specifications

The Mine Site Technologies Intrinsically Safe Wireless Network Switch is the heart of a scalable, high-speed, communications system for both underground and surface operations. Designed to cope with time-sensitive, high-bandwidth applications and enabling functionality such as VoIP, IP video streaming, control system management, mobile data acquisition, real-time vehicle diagnostics, and asset / personnel tracking right to the coal face. The ImPact Wireless Network Switch provides a quantum leap forward from traditional technologies by delivering improvements in reliability, bandwidth, data quality, system capacity and support for open standards. It also addresses the challenge of power distribution in an underground environment.

Fibre Ports:
- 4 x 100BASE-FX single mode transceivers
- IP65 connectors

Wireless Radio Ports:
- 2 x IEEE 802.11 b/g wireless access points.
- Support for 1, 2, 5.5 ,6 ,9,11, 12, 18, 24, 36, 48, 54 Mbps modes

Wireless Modulation:
- CCK (802.11b)
- DSSS/OFDM (802.11g)

Transmit Power:
- Max Approved 24dBm (251mW)

Receive Sensitivity:
- 802.11b:- 1 Mbps: -95dBm 11 Mbps: -90dBm
- 802.11g:- 6 Mbps:-90dBm 54 Mbps: -74dBm

Wireless Security
- WEP (64/128 bit encryption)
- WPA
- WPA2

Switch Processor:
- Wire speed switching.
- Quality of Service (QoS) support with four traffic classes.
- VLAN support

QoS Support:
- IEEE 802.1p tagged Frames.
- Automatic 802.1p tagging based on 802.1Q VLAN ID

Redundancy:
- Spanning Tree Protocol

Remote Management
- Remote monitoring via SNMP
- NTP time synchronisation
- Device modes:
    - i AP
    - ii Bridge
    - iii Repeater
- MAC Filter
- Web based device configuration
- Remote firmware upgrades via LAN
- MST device discovery protocol

Connectors
- All connectors are IP65

I.S. Approved Operating Range

Input voltage:
- 8 - 15.1V DC

Max input current
- 1.5A DC

Operating temperature:
- 0°C - 40°C

Max operating humidity
- 90%

Dimensions:
- 360mm x 370mm x 60mm

IP rating
- Designed to IP65

Certifications

	Certifications	Certificate No.s
IEC	- Exia	IECEx TSA 10.0022X
MSHA	- Exia	23-A100003-0

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