

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

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.

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| <p>Fibre Ports:</p> <ul style="list-style-type: none"> ▪ 4 x 100BASE-FX single mode transceivers ▪ IP65 connectors | <p>Remote Management</p> <ul style="list-style-type: none"> ▪ Remote monitoring via SNMP ▪ NTP time synchronisation ▪ Device modes: <ul style="list-style-type: none"> i AP ii Bridge iii Repeater ▪ MAC Filter ▪ Web based device configuration ▪ Remote firmware upgrades via LAN ▪ MST device discovery protocol |
| <p>Wireless Radio Ports:</p> <ul style="list-style-type: none"> ▪ 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 | <p>Connectors</p> <ul style="list-style-type: none"> ▪ All connectors are IP65 |
| <p>Wireless Modulation:</p> <ul style="list-style-type: none"> ▪ CCK (802.11b) ▪ DSSS/OFDM (802.11g) | <p>I.S. Approved Operating Range</p> <ul style="list-style-type: none"> Input voltage: <ul style="list-style-type: none"> ▪ 8 - 15.1V DC Max input current: <ul style="list-style-type: none"> ▪ 1.5A DC Operating temperature: <ul style="list-style-type: none"> ▪ 0°C - 40°C Max operating humidity: <ul style="list-style-type: none"> ▪ 90% Dimensions: <ul style="list-style-type: none"> ▪ 360mm x 370mm x 60mm IP rating: <ul style="list-style-type: none"> ▪ Designed to IP65 |
| <p>Transmit Power:</p> <ul style="list-style-type: none"> ▪ Max Approved 24dBm (251mW) | <p>Certifications</p> <ul style="list-style-type: none"> IEC - Exia MSHA - Exia |
| <p>Receive Sensitivity:</p> <ul style="list-style-type: none"> ▪ 802.11b:- 1 Mbps: -95dBm 11 Mbps: -90dBm ▪ 802.11g:- 6 Mbps: -90dBm 54 Mbps: -74dBm | <p>Certificate No.s</p> <ul style="list-style-type: none"> IECEX TSA 10.0022X 23-A100003-0 |
| <p>Wireless Security</p> <ul style="list-style-type: none"> ▪ WEP (64/128 bit encryption) ▪ WPA ▪ WPA2 | <p>Switch Processor:</p> <ul style="list-style-type: none"> ▪ Wire speed switching. ▪ Quality of Service (QoS) support with four traffic classes. ▪ VLAN support |
| <p>QoS Support:</p> <ul style="list-style-type: none"> ▪ IEEE 802.1p tagged Frames. ▪ Automatic 802.1p tagging based on 802.1Q VLAN ID | <p>Redundancy:</p> <ul style="list-style-type: none"> ▪ Spanning Tree Protocol |



Mine Site Technologies PTY Limited.
www.minesite.com.au

SYDNEY

25 - 27 Whiting Street
 Artarmon NSW 2064 Australia
 PO Box 156 Artarmon 1570
 Tel: +61 2 9437 4399
 Fax: +61 2 9437 5688
mst@minesite.com.au

KALGOORLIE

17 Darcy Lane
 West Kalgoorlie WA 6430 Australia
 PO Box 4200, Kalgoorlie 6430
 Tel: +61 8 9022 2300
 Fax: +61 8 9022 2311
mstwa@minesite.com.au

MOUNT ISA

15 Duke Street
 Mt Isa QLD 4825 Australia
 PO Box 2436 Mt Isa 4825
 Tel: +61 7 4749 4922
 Fax: +61 7 4749 4933
mstisa@minesite.com.au

MST offices also located in Sudbury and Calgary, Canada, Denver, Pittsburg and Washington USA

Mine Site Technologies Pty Limited reserves the right to make changes to the specifications and information contained in this brochure at any time and without notice. MST-NS40011210

