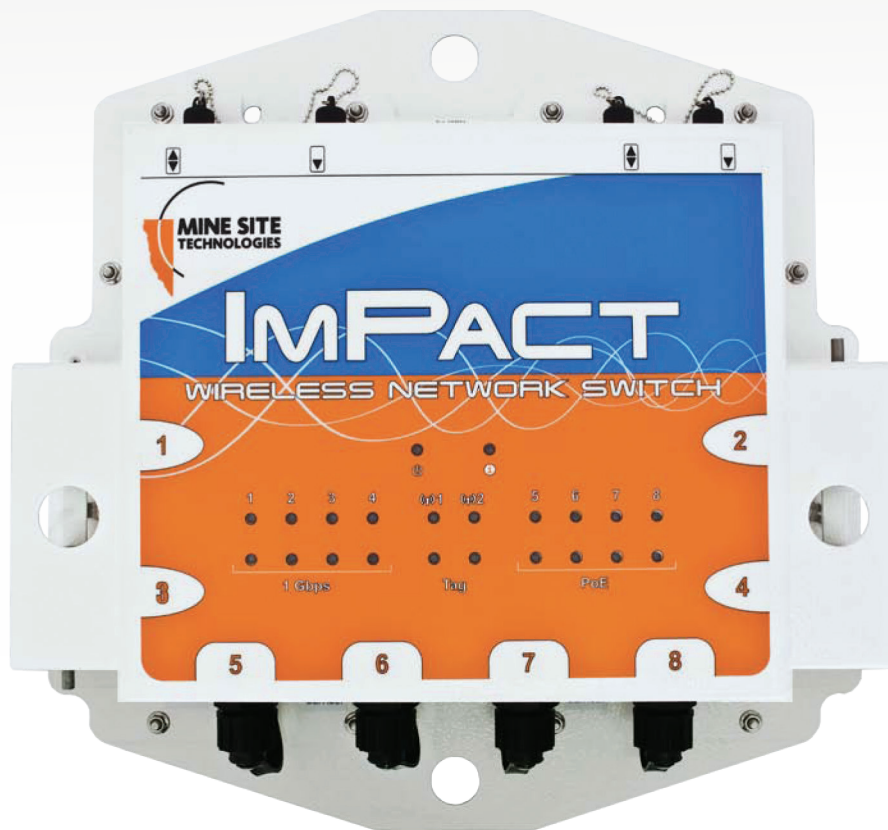




Productivity and Safety through
Mine-Spec digital applications

IMPACT

NS50 **wireless**
network switch



High bandwidth, low latency network backbone

Open standards for wired and wireless integration

Integrated VLAN and QoS for multi service applications

Rugged and mine-hardened enclosure

NS50 wireless network switch

Mine Site Technologies' (MST) IMPACT NS50 consists of a managed fibre optic Ethernet switch and up to two 802.11 b/g wireless access points, providing scalable wired and wireless network access for surface and hard rock mining environments. Its high bandwidth and low latency design enables multi-service applications to share the network infrastructure. This facilitates functionality such as VoIP, IP video streaming, remote PLC programming, mobile data acquisition, real-time vehicle diagnostics and asset/personnel tracking.

- High bandwidth and low latency network backbone enables video, voice, data and control applications
- Unique composite cable concept combines fibre and power and enables multiple NS50s to run off the same power supply
- Integrated VLAN and QoS for multi-service applications to share the network
- Open standards for wired and wireless integration enable 3rd party access
- Integrated Wi-Fi tag reading enables tracking applications
- Power over Ethernet (PoE) output for easy deployment of video cameras, access points and other RFID systems
- Wide 8-54V power supply input enables long DC cable runs
- EMC, ESD and transient suppression enables robustness in harsh electrical environments
- Rugged and mine-hardened enclosure enables operation in harsh underground environmental conditions
- Bulk configuration and remote monitoring reduces maintenance overheads

SPECIFICATIONS

NETWORK PORTS - FIBRE

- 4 x 1000BASE-LX single-mode SFP transceivers, factory fitted
- 100BASE-FX multi-mode and single-mode SFP transceivers can be substituted

NETWORK PORTS - WIRELESS

- 2 x IEEE 802.11b/g wireless access points, up to 54Mbps
- WEP (64/128 bit encryption), WPA, WPA2
- RP-TNC antenna connectors
- Main and Auxiliary antenna inputs for diversity-mode support
- 300m typical underground range

NETWORK PORTS - CAT5E ETHERNET

- 4 x IEEE 802.3 10BASE-T/100BASE-TX
- Rugged RJ45 connectors
- Auto MDI/MDIX with IEEE 802.3u compliant auto-negotiation
- Power over Ethernet (PoE) mode A, IEEE 802.3af compliant

NETWORK SWITCH

- Wire speed switching
- IEEE 802.1Q VLAN
- IEEE 802.1p Quality of Service (QoS), 4 traffic classes
- Automatic 802.1p tagging based on 802.1Q VLAN ID

REMOTE MANAGEMENT

- Remote monitoring via SNMP
- NTP time synchronisation
- MAC Filter
- Web based device configuration
- Centralised bulk device configuration
- Remote firmware upgrades via LAN
- MST device discovery protocol

POWER & ENVIRONMENT

- 8 – 54V DC
- 15 – 48V DC when PoE is required
- 0°C to 70°C Operating temperature
- -20°C to 80°C Storage temperature
- Enclosure designed to meet IP65 requirements

OUTER DIMENSIONS

- Baseplate: 410mm X 417mm
- Width: 73.5mm
- Packaged Weight: 5.9kg

The NS50 input voltage appears on the PoE power rails. To comply with 802.3f PoE requirements, it is recommended that the input voltage be limited to 48V when PoE is used. The NS50 requires a minimum input of 15V to generate the required PoE output voltage. Optional single and multi-mode 100BASE-FX SFP available on request.

Part Number	Configuration	Power Consumption			
		Idle (W)		Maximum (W)	
		PoE 48V rail Disabled	PoE 48V rail Enabled	PoE 48V rail Disabled	PoE 48V rail Enabled
NS5001	1 x Access Point Radio, 2 x Gbps Fibre Ports	7.8	8.6	10.5	11.3
NS5002	2 x Access Point Radio, 2 x Gbps Fibre Ports	9.6	10.4	12.2	13
NS5003	1 x Access Point Radio, 4 x Gbps Fibre Ports	9.6	10.4	11.5	12.3
NS5004	2 x Access Point Radio, 4 x Gbps Fibre Ports	11.2	12.0	13.9	14.7



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