HIGHLIGHTS

MODELS
• 4 10/100 POE+ ports, 2 10/100 ports, and 2 100FX/1000Base-X SFP ports
• 8 10/100 POE+ ports, and 4 100FX/1000Base-X SFP ports

PERFORMANCE
• Full Wire Speed Layer 2 Switching
• All PoE ports IEEE 802.3af and 802.3at compliant and support up to 30W concurrently
• Dual DC power input and Reverse power protection
• -40°C to +75°C operating temperature

FORM FACTOR
• DIN Rail or Wall Mountable
• Rugged IP30 Enclosure

FEATURES
• Highly Resilient network redundant LACP, Spanning tree STP, RSTP & MSTP, and fast Ring fail-over protection
• Port-based /tag-based VLAN, IEEE 802.1ad/QinQ VLAN, Add/remove VLAN tags,
• Multicasting support IGMP v1/v2/v3, proxy and snooping
• Multicast/Broadcast/Flooding Storm Control
• IEEE802.1x access control
• Per VLAN mirroring
• CLI/Web/SNMP management interfaces
• PoE PSE power management and PD power consumption

Industrial Networking

Designed for industrial use, Extreme Industrial Switches provide continuous uptime, manageability and operational efficiency. With full PoE+ power per port, each switch offers the performance needed for today’s power-hungry CCTV devices and WLAN access points.

Extreme Industrial Switches are an excellent choice for industrial environments, intelligent transportation systems, utilities, and smart cities. Full redundant ring technology creates fault-tolerant networks with high availability with industry standard technologies.

Specifications

OPERATING MODE
• Store and forward, L2 wire-speed/non-blocking switching engine
• MAC Addresses- 8K
• Jumbo Frames- 9K Bytes

COPPER RJ45 PORTS
• Speed- 10/100 Mbps
• MDI/MDIX Auto-Crossover
• Auto-negotiation, full and half duplex
• Ethernet isolation- 1500VRMS 1 minute

PLUGGABLE SFP PORTS
• 100FX SFP and 100/1000BaseX Transceiver
NETWORK REDUNDANCY
- Fast Failover Ring Protection with single and multiple rings, ring coupling, dual homing and chain
- IEEE 802.1D STP, IEEE 802.1w RSTP, IEEE 802.1s MSTP
- Static trunk or Dynamic via LACP (Link Aggregation Control Protocol)

BRIDGING, VLANS, MULTICAST
- Flow Control IEEE 802.3x (Full Duplex) and Back-Pressure (Half Duplex)
- VLAN Capacity- 1024
- Port-based VLANs; MAC-based VLANs; IP Subnet-based VLANs
- Protocol-based VLANs
- IEEE 802.1Q tag-based VLANs
- IEEE 802.1ad Double Tagging (Q in Q)
- IGMP v1, v2, v3 with up to 1000 multicast groups
- IGMP snooping and querying
- Immediate leave and leave proxy
- Throttling and filtering
- IEEE 802.1ab Link layer Discovery Protocol (LLDP)

TRAFFIC MANAGEMENT AND QOS
- Priority- IEEE 802.1p QoS
- Queues per port- 8
- Scheduling - Strict, Weighted Round Robin
- Port-based shaping

SECURITY
- Port Security- IP and MAC-based access control, IEEE 802.1X authentication Network Access Control, RADIUS and TACACS+ AAA (Authentication, Accounting and Authorization)
- Storm Control- Multicast/Broadcast/Flooding Storm Control

MANAGEMENT
- CLI
- GUI
- SNMP v1, v2c, v3
- Telnet
- Management Security- HTTPS, SSH, RADIUS client for management
- FTP- Configuration Import/Export, Firmware Upgrade
- SYSLOG
- Per VLAN mirroring
- Ethernet Copper Diagnostics
- DDMI for SFP ports
- MIBs- RFC 1757 RMON 1, 2, 3, 9; RFC 2674 Q-Bridge MIB, RFC-1213 MIB-II, RFC-1493 Bridge MIB; RFC 2233 IF MIB
- DHCP- Client, Server, Relay, Snooping, Option 82
- NTP and SNTP
- PoE scheduling, power control, PoE PD power consumption

POWER
- Redundant Input Terminals
- Input voltage range- 46-58VDC (54-58VDC for optimal 30W PoE performance)
- Reverse Power Protection
- Transient Protection- >15K Watts peak
- Power Consumption- 15 Watts without PD loading

LEDs
- Power input status
- Ethernet link and speed status
Environmental and Compliance

OPERATING TEMPERATURE RANGE
• -40°C to +75°C (cold startup at -40°C)

STORAGE TEMPERATURE RANGE
• -40 to +85 °C

HUMIDITY (NON-CONDENSING)
• 5 to 95% RH

REGULATORY AND SAFETY

North American ITE
• UL 60950-1 2nd Ed., Listed Device (U.S.) (In Process)
• CSA 22.2 #60950-1-03 2nd Ed. (Canada) (In Process)

International ITE

EMI/EMC Standards:

North American EMC for ITE
• FCC CFR 47 part 15 Class A (USA)
• ICES-003 Class A (Canada)

European EMC Standards
• EN 61000-6-2:2005
• EN 61000-4-4:2007 +A1:2011
• 2004/108/EC EMC Directive

International EMC Certifications
• CISPR 22: 2006 Ed 5.2, Class A (International Emissions)
• CISPR 24: A2:2003 Class A (International Immunity)

ROHS AND WEEE
• RoHS (Pb free) and WEEE compliant

MTBF
• > 25 years

Mechanical

INGRESS PROTECTION
• IP30

DIN
• Rail mounting or wall mounting

DIMENSIONS
• 77mm(W) x 154mm(H) x 128mm(D)

WEIGHT
• 1410g

Ordering Information

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>NAME</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>16801</td>
<td>ISW 4-10/100P,2-10/100T,2-SFP</td>
<td>4-port POE+ 10/100 2-Port 10/100 w/ 2-port SFP Operating Temperature -40°C - +75°C</td>
</tr>
<tr>
<td>16802</td>
<td>ISW 8-10/100P,4-SFP</td>
<td>8-port POE+ 10/100 w/ 4-port SFP Operating Temperature -40°C - +75°C</td>
</tr>
</tbody>
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*These products are currently subject to regional availability, please contact your Extreme Networks representative for additional details.*