



## Hardware Specifications

# HIPswitch 100 Series

### PHYSICAL AND POWER SPECIFICATIONS

Ethernet Ports	2 x 10/100 Mbps on RJ-45 ports, auto MDI/MDIX
Power Input Failover	Automatic failover between all inputs
DC Power Input	Dual 12-48 VDC on terminal block
Power Consumption	5W, typical
Storage Temp Range	-40° to 85° C (-40° to 185° F)
Operating Temp Range	-20° to 70° C (-4° to 158° F)
Operating Humidity	5% to 95%
Enclosure	IP-30
Dimensions	45mm W x 81mm D x 95mm H (1.77" W x 3.19" D x 3.74" H)
Mounting	DIN-rail or wall-mount
Weight	410g (0.9 lbs.)

### POWER OVER ETHERNET (POE)

Operating Mode	IEEE 802.3at PoE PD
POE Input Failover	Automatic failover between all three inputs
Protection Features	Overload and short-circuit protection
Isolation Voltage	1000 VDC minimum
Isolation Resistance	100 MΩ minimum

### CELLULAR MODULE (100G MODEL ONLY) - SUPPORTED BANDS

4g Cellular Modes	<p>LTE: 1900(B2)/ 1700(B4)/ 850(B5)/ 700(B13)/ 700(B17)/ 1900(B25) MHz</p> <p>Data rates: Category 3</p> <p>Downlink: 100 Mbps (20MHz bandwidth), 50 Mbps (10 MHz bandwidth)</p> <p>Uplink: 50 Mbps (20 MHz bandwidth), 25 Mbps (10 MHz bandwidth)</p>
3g Cellular Modes	<p>CDMA/EVDO rev. a/b: 800/1900 MHz</p> <p>Data rates: CDMA IS-856 (1xEV-DO Release A), Up to 3.1 Mbps forward channel, Up to 1.8 Mbps reverse channel</p> <p>CDMA IS-2000, Up to 153 kbps, simultaneous forward and reverse channel</p> <p>Circuit-switched data bearers up to 14.4 kbps</p>
3.5g Cellular Modes	<p>UMTS/HSDPA/HSUPA/HSPA+/DC-HSPA+: 2100(B1)/1900(B2)/1700(B4)/850(B5)/900 (B8) MHz</p> <p>Data (HSPA+) rates:</p> <p>Downlink: Up to 42 Mbps (category 24)</p> <p>Uplink: Up to 5.76 Mbps (category 8)</p>
2g Cellular Modes	<p>GSM/GPRS/EDGE: GSM850/EGSM900/DCS1800/PCS1900 MHz</p> <p>Data rates:</p> <p>EDGE throughput up to 236 kbps</p>
Cellular Antenna Connectors	Two SMA female connectors
SIM Card Slot	1 externally accessible 2FF Mini-SIM

### SERIAL INTERFACE (-S MODELS ONLY)

Protocols	RS-232, RS-422, RS-485
Connector	DE-9M
Isolation Voltage	2500 Volts minimum

### REGULATORY APPROVALS

EMI	FCC Part 15, CISPR (EN55022) class A IC ICES-003
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
Shock	IEC60068-2-27
Free Fall	IEC60068-2-31
Vibration	IEC60068-2-6
Safety	EN60950-1