

HIPswitch-100 Series Datasheet

HIPswitch-100 Series	
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	LTE: 1900(B2)/ 1700(B4)/ 850(B5)/ 700(B13)/ 700(B17)/ 1900(B25) MHz

	<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:</p> <p>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+:</p> <p>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:</p> <p>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
Wireless LAN (Only applicable to Wi-Fi-equipped models)	
Modes	IEEE 802.11 b/g/n
Modulation	<p>802.11b: DSSS (DBPSK, DQPSK, CCK)</p> <p>802.11a/g: OFDM (BPSK, QPSK, 16-QAM, 64-QAM)</p> <p>802.11n: OFDM (BPSK, QPSK, 16-QAM, 64-QAM)</p>
Frequency Band	America/FCC: 2.412-2.462 GHz (11 channels)

	Europe/CE/ETSI: 2.412 – 2.472 GHz (13 channels)
Transmission Rate	802.11b: 1/2/5.5/11 Mbps 802.11g: 6/9/12/18/24/36/48/54 Mbps 802.11n(40MHz): Up to 150 Mbps
Transmit Power	802.11b: 13.5dBm ± 1.5dBm 802.11g: 13.5dBm ± 1.5dBm 802.11n (2.4G@20MHz): 13.5dBm ± 1.5dBm
Receiver Sensitivity	802.11b: ≤ -90dBm ± 2dBm @1Mbps 802.11n (2.4G@40MHz, MCS7): -68dBm ± 2dBm 802.11g: -72dBm ± 2dBm@54Mbps
Wi-Fi antenna connectors	1 Reverse Polarity SMA female connector
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