

### Features

- Provides one 10 Mb fiber port and two (2) 10/100 copper switch ports
- Two RJ-45 ports support IEEE 802.3u to enable attaching any 10 Mb or 100 Mb device
- Three models for three application environments:
  - Office, wiring closet
  - Factory floor
  - Outdoors
- AC power for all models, Factory floor and Outdoor models also have integral DC terminal blocks
- Same packaging and mounting options as the popular Magnum 14-Series Media Converters



Office and Wiring Closet



Hardened for Factory Floor



Premium-rated for Outdoors

For any user who needs a 10 Mb fiber link connected to one or two 10/100 copper devices, the “go anywhere” Magnum™ CSN14 Converter Switch™ is a versatile and handy solution.

The Magnum CSN14 family of Converter Switches, with a 10 Mb Fiber port built in covers the full range of application environments with regular (office), Hardened (factory floor), and Premium-rated (outdoor) versions. Extra features for heavy-duty and extended temperature operation ranges are included selectively in the Hardened factory-floor and Premium-rated outdoor models. This selection of models offers the best price-to-value ratio for each user and installation. The compact package is ideal for “edge of the network” installation, and can be conveniently mounted to suit any application.

■ The Magnum CSN14 regular-package units are for office and indoor wiring closet environments. These are the economical base units in the CSN14 Switch family. An external AC power supply for either North America (-d, 115vac 60Hz) or international (-I, 230vac, 50Hz) is included. The ambient temperature rating is 0° to 40°C, office grade. A robust metal case with convection cooling is featured. Metal mounting clips are included, and rack-mount tray options are available.

■ The Magnum CSN14H Hardened units are for factory floor applications. The CSN14H models are built with high-grade components and are constructed using special thermal techniques (patent pending) and a metal case for heavy duty industrial jobs. In addition to a Hardened AC power option and jack, terminals for internal DC power choices at 8 to 15V, 24V or -48V DC are included. The ambient temperature rating is for industrial use. No internal air flow is required for cooling, so it resists dust, dirt, moisture, smoke and insects. Mounting options include stand-alone panel-mounting, DIN-Rail, or rack-mount tray.

■ The Magnum CSN14P Premium-rated units are for temperature uncontrolled sheltered applications, typically located outdoors. The CSN14P models are built with premium-grade extended temperature components, and use similar thermal techniques (patent pending) as the CSN14H Hardened units. In addition to a Premium-rated AC power option and jack, terminals for internal DC power choices at 8 to 15V, 24V or -48V DC are included. When used outdoors, the CSN14P should be sheltered from the elements. Mounting options include stand-alone panel-mounting, DIN-rail, or rack-mount tray.

All CSN14 Converter Switch models come with two (2) sets of LED indicators. One set is on the front for viewing convenience when the unit is wall-mounted, and one LED set is mounted in the end adjacent to the ports for easy viewing when units are in a rack-mount tray. The Magnum CSN14 family of Converter Switches and other Magnum products are designed and manufactured in the USA and backed by a three-year warranty.



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Industrial Networking at Its Best™

### PERFORMANCE:

**Fiber port:** 10 Mb HDX/FDX, ST connectors for multi-mode or single-mode RJ-45 Ports Data Rate: 10 / 100 Mb, FDX and HDX modes.

Auto-negotiation and auto-cross MDI-MDIX on both RJ-45 ports

Occurs at LINK-enable. No crossover cables required.

Non-blocking switching, 128KB packet buffer memory

Address buffer storage = 2K addresses

Address buffer age-out time = 300 seconds

### NETWORK STANDARDS:

Ethernet IEEE 802.3, IEEE 802.3u; IEEE 802.1p, 100BASE-TX, 10BASE-T, 10BASE-FL

### VLANS SUPPORT:

Data packets that have the 4 bytes tagged VLAN field (IEEE 802.1q) field inserted in them are received and transmitted unchanged by all CSN14 Converter Switches.

### OPERATING ENVIRONMENT:

Ambient Temperature ratings:

 CSN14: the ambient temperature rating is 0° to 40°C.

 CSN14H: the ambient temperature rating is -25°C to 60°C long term per independent agency tests (UL), or -40°C to 85°C short term per IEC Type Tests

 CSN14P: the ambient temperature ratings of -40°C to 75°C long term per indep. agency tests (UL), or -50°C to 100°C short term per IEC Type Tests.

Cold start: CSN14H model to -20°C, CSN14P model to -40°C

Ambient Relative Humidity, all models: 5% - 95% (non-condensing)

Altitude, all models: -200 to 50,000 ft. (-60 to 15,000m)

Conformal coating (humidity protection) option, request quote.

H and P models are designed for NEBS compliance, including vibration, shock, and altitude.

### PACKAGING:

Enclosure: Robust sheet metal (steel); H&P models: IEC 529 rated IP40

Dimensions of units: 3.5 in H x 3.0 in W x 1.0 in D (8.9 cm x 7.6 cm x 2.5 cm)

Weight: CSN14 Switch Units: 8.6 oz (243g)

Power Supply - d, i: 5.8 oz (165g)

Power Supply - Hd, Hi: 5.8 oz (165g)

Power Supply - Pd, Pi: 7.9 oz (225g)

Cooling Method: Convection on regular model, case used as a heat sink on H and P models

### MOUNTING FOR CSN14 FAMILY OF SWITCH UNITS:

Metal panel mounting clips: included

DIN-Rail mounting option:

Model # DIN-RAIL MC2, illustrated here;

Rack-mount option: Model MC14-TRAY.

Depth: 6.0", Width 17",

Height 2.25"(15 cm D x 43cm W x 5.7cm H)



### SWITCHES:

Fiber port has manual selection of HDX or FDX, default is HDX

### RJ-45 PORT CONNECTORS:

RJ-45 with auto-cross, 100BASE-TX and 10BASE-T: shielded 8-Pin female. Supports shielded (STP) and unshielded (UTP) Cat. 3, 4, 5.

### LED INDICATORS, dual, top front and in end:

POWER: ON for power applied

10/100 per RJ-45 port: Steady ON for 100Mb, OFF for 10 Mb speed

LK/ACT per port: Steady ON for LINK with no traffic, blinking for Activity.

F/H per port in end: Steady ON for F/D mode, OFF for H/D mode.

### POWER SUPPLIES for AC (EXTERNAL):

Power input DC jack (8 to 15V) is 2.5mm, center +ve, with 6ft. DC cord

 Input: 95-125vac at 60 Hz for "-d" models, 215-240vac at 50 Hz for "-i" models that have IEC power connector in the ext. power unit.

 Input: 100-240vac at 47-63 Hz for "-Hd", "Hi" models, see footnote 1

 Input: 100-240vac at 47-63 Hz for "-Pd", "Pi" models, see footnote 2

### POWER INPUT OPTIONS for DC:

12V DC, internal (range of 8.0 to 15V DC), built-in screw terminal block for +, -, ground. The 12V DC jack is also present.

24V DC internal (range of 18 to 36V DC) built-in screw terminal block for +, -, ground. The 12V DC jack is also present.

-48V DC internal (range of 30 to 60V DC), built-in screw terminal block for +, -, ground. The 12V DC jack is also present.

Note1: the 12V DC jack can be used for dual source DC power input

Note2: internal DC power floats, user may ground + or - if desired.

Power Consumption, all models: 5.0 Watts typical. 6 Watts max.

### AGENCY APPROVALS AND STANDARDS COMPLIANCE:

UL listed (UL60950), cUL, CE, Emissions meet FCC Part 15, Class A. NEBS L3 and ETSI compliant

H and P models: IEEE 1613 Env. Std for Electric Power Substations

P model: NEMA TS-2 and TEES for traffic control equipment

P model: designed for above-the-ceiling (plenum) installation

IEC61850 EMC and Operating Conditions Class C Power Substations

All models: compliant with EN50155 Railway Applications Standard

### WARRANTY:

Three years

Made in USA

1: External 12V1A power supply, wall plug or power cord for North America AC receptacles. Temperature rating same as CSN14, see above. (North America: for spare, order Model PSH-12V1A-Hd. International: order Model PSH-12V1A-Hi with IEC plug).

2: External 12V1A power supply, rated for outdoor temperatures same as CSN14, see above. Universal AC input with recessed IEC plug. (North America: for spare, order Model PSP-12V1A-Pd, International: order Model PSP-12V1A-Pi with IEC plug).

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## Ordering Information

### Magnum CSN14-d,i

Magnum Converter Switch, one 10 Mb multi-mode fiber ST and two 10/100 RJ-45 ports in a compact package, rated for office and wiring closet environments.

### Magnum CSN14H-Hd,Hi

Magnum Hardened Converter Switch, one 10 Mb multi-mode fiber ST and two 10/100 RJ-45 ports in a compact package, rated for factory floor environments. Internal 8 to 15VDC terminal blocks. External AC power supply included.

### Magnum CSN14H-12VDC

Same as CSN14H-Hd,Hi except external AC power supply not included.

### Magnum CSN14H-24VDC

Same as CSN14H-12VDC except for 24V DC power input.

### Magnum CSN14HR-24VDC

Same as CSN14H-24VDC but includes DIN-Rail mounting option, Model DIN-RAIL MC2

### Magnum CSN14H-48VDC

Same as CSN14H-12VDC except for -48V DC power input.

### Magnum CSN14P-Pd,Pi

Magnum Premium-rated Converter Switch, one 10 Mb multi-mode fiber ST and two 10/100 RJ-45 ports in a compact package, rated for temperature un-controlled (outdoor) environments. Internal 8 to 15VDC terminal block. External AC power supply included.

### Magnum CSN14P-12VDC

Same as CSN14P-Pd,Pi except external AC power supply not included.

### Magnum CSN14P-24VDC

Same as CSN14P-12VDC except for 24V DC power input.

### Magnum CSN14PR-24VDC

Same as CSN14P-24VDC but includes DIN-Rail mounting option, Model DIN-RAIL MC2.

### Magnum CSN14P-48VDC

Same as CSN14P-12VDC except for -48V DC power input.

**Note:** for a single-mode 10 Mb fiber port, insert the letter "S" after the "14" in the model number



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Industrial Networking at Its Best™

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