

Features

- Provides eight RJ-45 ports per stackable hub, each port speed-sensing for 100 or 10Mb
- Combines both 100Mb and 10Mb port speeds with stackability for expansion and flexibility in offices and labs.
- Supports stacks of up to 3 units for a maximum of 24 10/100 Ethernet ports
- Complies with 100BASE-T and 10BASE-T Ethernet standards; full 100Mb Class II + repeater functionality
- Comes with a durable metal enclosure, internal auto-ranging power supply; NEBS Certification and -48VDC optional.



Magnum™ DS880 Stackable Hubs provide the flexibility of 100Mb and 10Mb Ethernet ports in one hub along with the expandability of stacking. Small-to-medium-sized networks that need to mix ports at 100Mb performance for high bandwidth applications with economical 10Mb ports for other nodes can benefit from the dual-speed 10/100 Magnum DS880 hubs.

Network chip technology enables the Magnum DS880 hubs to identify either 100Mb or 10Mb signals on a per-port basis. Each RJ-45 port is independently auto-sensing for speed, adapting to match the speed of the connected device. Each port can change from 10Mb to 100Mb (or vice-versa) at any time without affecting the operation of the other connected ports. This capability provides the ultimate in flexibility for small-to-medium-sized mixed-speed networks that are gradually transitioning from 10Mb to 100Mb Fast Ethernet speed.

The Magnum DS880 units support two shared traffic domains, one at 100Mb and one at 10Mb. Each port is connected into the appropriate 100Mb or 10Mb domain, depending on its speed as sensed. As DS880 stacked units are added, the two domains automatically expand to serve the new ports, up to the three-unit-high stacking capability of the system. Any combination of 100Mb or 10Mb ports may be in use.

One model of the Magnum DS880-series hubs includes an internal switch or bridge to interconnect the two shared traffic domains, enabling all users on a DS880 stack, whether 100Mb or 10Mb, to talk to each other. This self-learning switch filters and selectively forwards packets between the two traffic domains, unifying them. The performance of each domain is maintained at its peak potential, uncompromised by local traffic on the other domain. Only one DS880 with an internal switch unit is necessary to support the entire stack.

The eight-port DS880 hubs have an internal auto-ranging power supply. They can be conveniently mounted in the workplace or in a wiring closet area. The Magnum DS880 Stackable Hubs and other Magnum products are designed and manufactured in the USA and backed by a three-year warranty.

PERFORMANCE:

Data Rate: 100 or 10M bits / second, per port, auto-sensing for speed.
The hub supports two traffic domains, one at 100Mb and one at 10Mb, operating concurrently.

PDV (100M Path Delay Value): 80BT exceeds Class II specification
Partitioning: Enforced after 63 consecutive collisions
Auto-reconnect: Occurs after one packet of error-free reception

INTERNAL SWITCH or BRIDGE:

(One per stack, optional, to interconnect the two traffic domains)
Processing type: Store and Forward, Auto-learning: 8K addresses, self-learning
Packet buffers: 2MB, dynamically allocated and shared on both sides
Latency (not including packet time):
10 to 100Mb: 5µs, 100 to 10Mb: 5µs
CPU type: State machine

NETWORK STANDARDS:

100Mb: IEEE 802.3u, 100BASE-TX
10Mb: IEEE 802.3, 10BASE-T
Auto-Speed-Sensing: IEEE 802.3u

OPERATING ENVIRONMENT:

Ambient Temperature: 32°F to 120°F (0°C to 50°C)
Storage: -5°F to 140°F (-20°F to 60°C)
Ambient Relative Humidity: 10% - 95% (non-condensing)

NETWORK CABLE CONNECTORS:

Eight RJ-45 shielded female
100Mb: Category 5 UTP/STP, 10Mb: Cat. 3,4, 5 UTP

STACKING CABLE:

A stacking cable with 50-pin "SCSI" male connectors, shielded, 9 inches (23 cm) long, included with each DS880-A "add-on" unit. Supports stacking up to 3 units high.

SWITCH, MANUAL:

Up-link: Converts RJ-45 port #8 from a regular (= position) user segment port to a crossover (X position) up-link port for on-off connection to a central hub or another cascaded hub.

POWER SUPPLY (INTERNAL):

AC Power Connector: IEC-type, male recessed, rear of chassis
Power Input Voltage: 90 to 260 VAC (auto ranging)
Power Input Frequency: 47 to 63 Hz
Power Consumption: 20 watts max.

-48VDC POWER SUPPLY (OPTIONAL "NEBS" Models):

Input: 36 to -72 VDC (auto-ranging)
Std. Terminal Block: "-", GND, "+",
Power Consumption: 20 Watts max

MECHANICAL:

Enclosure: Rugged high-strength sheet metal. Suitable for stand-alone or shelf mounting. Two units fit side by side in a 19" rack space.

Dimensions: 1.3 in H x 8.5 in W x 9.75 in D
(3.3 cm x 21.6 cm x 25.0 cm)

Weight: 2.5lb. (1.15 kg)

Cooling Method: Fan cooled, internal @ 9cfm

LED INDICATORS ON CHASSIS:

PWR: Steady on when power applied

BR: Steady on, unit has bridge inside

ACT: Common packet activity indicator, one for 100Mb domain and one for 10Mb domain

COL: Common collision indicator, one for 100Mb domain and one for 10Mb domain

LED INDICATORS PER RJ-45 PORT:

100: Steady on when the port senses operation at 100Mb speed

LK: Steady on when twisted-pair link is operational.

RX: Flashing when the port is receiving data

AGENCY APPROVALS:

UL Listed (UL1950), cUL, CE

Emissions meet FCC Part 15, Class A

WARRANTY:

Three years

Made in USA

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Ordering Information

Magnum DS880-B:

Dual-speed 10/100 Stackable Hub with eight RJ-45 ports, each auto-sensing for 100Mb or 10Mb operation. Stackable, up to three units (24 ports) high, with all ports in the the stack operating in two separate traffic domains, one domain at 10Mb/s. Includes an internal switch that bridges the two traffic domains. Stack with up to two DS880-A units. One DS880-B unit per stack supports all ports at 100Mb and 10Mb communicating with each other. The internal switch has a 2MB dynamic store-and-forward packet buffers and 8K node addresses, self-learning. Includes internal auto-ranging power supply, (-48VDC optional) cooling fan, and metal brackets for optional wall-mounting.

Magnum DS880-A:

Dual-Speed 10/100Mb Stackable Hub "add-on" unit with eight RJ-45 ports, each auto-sensing for 100Mb or 10Mb operation. Stackable (normally as an add-on to a DS880-B unit) up to three units (24 ports) high, with all ports in the stack operating in two separate traffic domains, one domain at 100Mb/s and one domain at 10Mb/s.



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