

Features

- DS80F units provide six 10/100 dual-speed RJ-45 ports for users, one 10/100 switched RJ-45 port for servers or for users, and one switched 100Mb Fiber FDX "backbone" port.
- DS80C units provide six 10/100 dual-speed RJ-45 ports and two 10/100 full-duplex switched RJ-45 backbone ports.
- Compact office-hub packaging brings 100Mb fiber backbone connectivity to the workplace
- Fast Ethernet fiber connectors may be multi-mode SC, ST, or single-mode (either 20km or 40km "long-haul") SC type.
- Comes with a durable metal enclosure, metal mounting clips, and an external power supply for either 115vac or 230vac power.



Magnum™ DS80F Dual-Speed Personal Hubs® provide the performance of a 100Mb switched fiber link upstream with the convenience of dual-speed 10/100 copper ports for workplace LAN connections, all in one compact unit about the size of a paperback book. Where "future-proof" fiber cabling is installed in the building infrastructure to a wall plate or jack in each office, lab, classroom or small workgroup area, the DS80F-series enables 10/100 copper-cable devices to be economically connected. No media converter is required.

Designed for use in an individual's multi-system office, or to support a small workgroup, a remote office or a classroom, the Magnum DS80F and DS80C are easy to install and use. Addresses of attached nodes are automatically learned and maintained, adapting the switching services to network changes and expansions to provide plug-and-play operation. Flow control maximizes throughput across all ports. Top-mounted LEDs provide status information on each port.

A DS80F Personal Hub has one full-duplex 100MB switched fiber port, one "N-way" switched RJ-45 port and six half-duplex 10/100 auto-negotiating RJ-45 ports. While the switched fiber port is typically for a backbone connection, the switched RJ-45 port can be used at 100Mb FDX for a high-performance workplace server or to cascade to another DS80-series unit for expansion.

The Magnum DS80Fs 100Mb FDX fiber port supports full distance fiber LAN cabling, and is typically connected to a rack-mount fiber switch (such as the Magnum Quad-Series Fiber Switches) in a wiring closet upstream. The fiber port is available with a multi-mode ST, SC, or MTRJ-type connector, or with a single-mode SC-type (to support either 20 or 40 kilometers). For applications where the fiber port is not needed, the DS80C model substitutes a second full-duplex copper port for the fiber port.

The DS80-series Dual-Speed Personal Hubs include an external power supply unit for 115 or 230vac, a rugged metal case and metal mounting brackets suitable for wall mounting. The Magnum DS80-series Personal Hubs and the other high quality Magnum products are backed by a three-year warranty.



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PERFORMANCE:

Data Rate, Ports 3-8: 100 or 10 M bits / second, auto-negotiating for speed. Partitioning: Enforced after 63 consecutive collisions
Auto-reconnect: Occurs after one packet of error-free reception
DS80F Port 1 is "N-way" switched, #2 is fixed 100Mb fiber.

Note: For DS80F models, Port #2SW always supports fiber ports only, and the RJ-45 connector is inoperative at all times.

DS80C Ports 1 & 2 are "N-way" switched.

Processing type: Store and Forward, with collision-based flow control

System aggregate forwarding rate: 446K pps (packets per second)

System aggregate filtering rate: 446K pps @ 100BASE-TX/FX

Packet buffers: 512KB

Address Table Capacity: 8K entries (nodes) max.

Latency: less than 5 μ s (not including packet time)

PDV: 50BT

NETWORK STANDARDS:

Ethernet: IEEE 802.3u, 100BASE-TX, FX; IEEE 802.3, 10BASE-T

Auto Negotiation: IEEE 802.3u, speed-sensing occurs at LINK enable on each port separately

All 10 Mb ports obey the rules for configuring 10 Mb Ethernet, all 100Mb ports use Fast Ethernet rules.

OPERATING ENVIRONMENT:

Ambient Temperature: 32° to 120°F (0° to 50°C)

Storage: -5° to 160°F (-20° to 70°C)

Ambient Relative Humidity: 10% - 95% (non-condensing)

POWER SUPPLY (EXTERNAL):

Power Input Voltage: 95-125 vac at 60 Hz for "-d" models, 200-250 vac at 50 Hz for "-i" models that have IEC power cable connector in the external power unit.

Power Supply Rating: 2amp at 5vdc

Power Consumption: 8 watts typical, 10 watts max.

Power Supply Options: -48vdc and -24vdc external units are available

MECHANICAL:

Enclosure: Rugged high-strength sheet metal. Suitable for stand-alone shelf or wall mounting. Metal mounting brackets included.

Dimensions: 1.25 in H x 6.75 in W x 5.0 in D
(3.2 cm x 17.1 cm x 12.7 cm)

Weight of the unit: 1.5 lb. (680 g.)

Weight, power supply: 1.0 lb. (455 g.)

Cooling Method: Convection, case used as a heat sink

Ordering Information

Magnum DS80F-MSC-d, or -i 8-port Dual-Speed Personal Hub with one full-duplex 100Mb switched fiber port (multi-mode SC-type connector), one "N-way" switched RJ-45 port, and six half-duplex 10/100 auto-negotiating ports. Includes store-and-forward switching that filters and forwards data moving between the two switched ports, and among the 10/100 user ports. The internal switch has 16K nodes address table and 512KB packet buffers.

Magnum DS80F-MST-d, or -i Same as DS80F-d, but with multi-mode ST-type fiber connector.

Magnum DS80F-SSC-d, or -i Same as DS80F-d, but with single-mode SC-type fiber connector to support 20km fiber segments.

Magnum DS80F-MTRJ-d, or -i Same as DS80F-d, but with multi-mode MTRJ-type fiber connector.

Magnum DS80F-SSCL-d, or -i Same as DS80F-d, but with single-mode SC-type fiber connector to support 40km "long-haul" segments.

Magnum DS80C-d, or -i Same as DS80F-d, but with second RJ-45 full-duplex switched port instead of the fiber port.

Use "-d" suffix for external power supply at 115vac 60Hz; use "-i" suffix for external power supply at 230vac 50Hz.

NETWORK CABLE CONNECTORS:

Fiber: 100Mb Multi-mode ST- or SC-type, 100Mb Single-mode SC-type 20km and 40km "long-haul" RJ-45 shielded female, 100Mb: Category 5 UTP/STP, 10 Mb: Cat. 3,4, 5 UTP

UP-LINK, PORT # 1SW:

Port 1 (switched RJ-45) has a manual crossover (MDIX up-link) switch for connection to a central switch or to another DS80-series (or equal) unit.

Port #1 is an auto-negotiating port, and can operate at 10 or 100Mb speed and at full- or half-duplex mode depending on the capability of the connected device and the operation of the auto-negotiation session.

DS80C: "FF" or "A" switch:

Port 2SW (a switched port) has a "FF - A" manual switch. In the "FF" position, it fixes port 2 at full 100Mb. In the "A" position, port 2 is set at 10/100 auto-negotiation.

DS80F: FULL or HALF switch:

Ports 1SW and 2SW (the switched ports) have a common "F - H" manual switch. In the "F" position, it causes full-duplex mode to be advertised for the standard 802.3u auto-negotiation session on port 1sw. For fiber, it forces full-duplex mode at 100Mb. In the "H" position, it causes half-duplex mode to be advertised for auto-negotiation, and for fiber it forces half-duplex mode.

LED INDICATORS ON CHASSIS:

LED's are viewed from the top surface.

Power: Steady on when power applied

Error: Self-test at power up failed

LED INDICATORS PER RJ-45 PORT:

Link/Act: Steady ON for LINK with no traffic, blinking indicates port is transmitting and receiving

Speed: ON = 100Mb; OFF = 10 Mb/s (with LINK On)

F/H: (For full/half switched ports 1SW and 2SW only): ON for full-duplex mode, OFF for half-duplex

AGENCY APPROVALS:

UL Listed (UL1950), cUL, CE

Emissions meet FCC Part 15, Class B

WARRANTY:

Three years

Made in USA

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GarrettCom[®]

Industrial Networking at Its Best™

GarrettCom, Inc.

47823 Westinghouse Drive

Fremont, CA 94539

PH: (510) 438-9071

FAX (510) 438-9072

Email: mktg@garrettcom.com

Web: www.GarrettCom.com