

### Features

- Personal Switch™, provides up to eight 10/100 switched RJ-45 ports, for servers or for users
- P80F models provide a 100Mb fiber backbone port built in, no media converter needed
- Compact office-size desktop packaging brings future-proof fiber backbone connectivity to the workplace
- Fast Ethernet fiber connectors may be multi-mode SC, ST, MTRJ, or single-mode (either 20km or 40km "long-reach") SC type
- Comes with a durable metal enclosure, metal mounting clips, and an external power supply for either 115vac or 230vac power



**M**agnum™ P80-series Personal Switch™ provides the performance of a 100Mb switched fiber link upstream, coupled with the convenience of switched 10/100 copper ports for workplace LAN connections, all in one compact unit about the size of a paperback book. It is designed for "fiber-to-the-workplace" applications. 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 P80-series enables 10/100 copper-cable devices to be economically connected. No media converter is required.

In a typical application, a P80 Personal Switch is used in an individual's multi-system office, or to support a small workgroup, a remote office, or a classroom. The Magnum P80F and P80C 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 P80F Personal Switch has one full-duplex 100Mb switched fiber port, and seven switched 10/100 full/half auto-negotiating RJ-45 ports. While the switched fiber port is typically for a backbone connection, the switched RJ-45 ports can be used for a high-performance workplace server, power users, or to cascade to another P80-series unit for expansion.

The Magnum P80Fs 100Mb fiber port supports full distance fiber LAN cabling to a wiring closet switch 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 P80C model substitutes an N-way copper port for the fiber port.

The P80-series Personal Switches include an external power supply unit for either 115 or 230vac, a rugged metal case and metal mounting brackets suitable for wall mounting. The Magnum P80-series Personal Switches and the other high quality Magnum products are backed by a three-year warranty.



**GarrettCom**®

Industrial Networking at Its Best™

### PERFORMANCE:

RJ-45 Ports: 100 or 10Mb / second, auto-negotiating for speed and F/H duplex mode. Model P80F, Port #2, is 100Mb fiber.

**Note: For P80F models, Port # 2 always supports fiber only, and the # 2 RJ-45 port is inoperative at all times.**

Processing type: Store and Forward, with IEEE 802.3x full duplex, flow control non-blocking.

System aggregate forwarding and filtering rate: 1190K pps (packets per second), @ 100BASE-TX/FX (All ports 100Mb full speed)

Packet buffers: 512Kb

Address Table size: 16K nodes

Latency: less than 5µs (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 occurs at LINK enable, for each port. All 10Mb ports obey the rules for configuring 10Mb Ethernet, all 100Mb ports use Fast Ethernet rules.

### NETWORK CABLE CONNECTORS:

Fiber: 100Mb Multi-mode -ST or -SC or MTRJ-type, 100Mb Single-mode SC-type 25km and 40km RJ-45 shielded female 100Mb: Category 5 UTP/STP, 10 Mb: Cat. 3,4, 5 UTP

### OPERATING ENVIRONMENT:

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

Storage: -5°F to 160°F (-20°C to 70°C)

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

### POWER SUPPLY (EXTERNAL):

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

Power Supply Rating: 2 amp at 5vdc

Power Input: 8 watts typical, 10 max.

Power 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.

## Ordering Information

Magnum P80F-MSC-Hd, or -Hi

8-port Dual-Speed Personal Switch with one 100Mb switched fiber port (multi-mode SC-type connector), and seven half- or full-duplex 10/100 auto-negotiating ports. The fiber port is full duplex or half-duplex, manually selected. Unit includes store-and-forward switching that filters and forwards data moving between the switched ports. The internal switch has 16K nodes address table and 1.0 MB packet buffers. External heavy-duty power supply.

Magnum P80F-MST-Hd, or -Hi

Same as P80F-MSC, but with multi-mode ST-type fiber connector.

Magnum P80F-MTRJ-d, or -Hi

Same as P80F-MSC, but with multi-mode MTRJ-type fiber connector.

Magnum P80F-SSC-Hd, or -Hi

Same as P80F-MSC, but with single-mode SC-type fiber connector to support 25km fiber segments.

Magnum P80F-SSCL-Hd, or -Hi

Same as P80F-MSC, but with single-mode SC-type fiber connector to support 40km "long-reach" segments.

Magnum P80C-Hd, or -Hi

Same as P80F-MSC, but with Port # 2 as another RJ-45 N-way 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.

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

### UP-LINK, PORT # 1 SW:

Port 1 (switched RJ-45) has a manual crossover (MDIX up-link) switch for connection to a central switch or for cascading to another P80-series (or equal) switch or hub.

**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.**

### P80C: "FF" or "A" switch:

**P80F: FULL or HALF switch:** Port 2 (the fiber port) has an "F - H" manual switch. In the "F" position, it forces full-duplex mode at 100Mb. In the "H" position, it forces half-duplex mode at 100Mb.

### LED INDICATORS ON CHASSIS:

LEDs are viewed from the top surface.

Power: Steady on when power applied

### LED INDICATORS PER PORT:

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

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

F/H: 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

©2006 GarrettCom, Inc. Printed in United States of America Doc No. P80-R4 11/06  
GarrettCom, Inc. reserves the right to change specifications, performance characteristics and/or model offerings without notice. Magnum is a trademark and Personal Hub is a registered trademark of GarrettCom, Inc. NEBS is a registered trademark of Telcordia Technologies. UL is a registered trademark of Underwriters Laboratories.



# GarrettCom®

Industrial Networking at Its Best™

GarrettCom, Inc.

47823 Westinghouse Dr

Fremont, CA 94539

PH: (510) 438-9071

FAX (510) 438-9072

Email: [mktg@garrettcom.com](mailto:mktg@garrettcom.com)

Web: [www.GarrettCom.com](http://www.GarrettCom.com)