

# SN1604 Power Patch Panel

## Centralized Power for LAN Phones through Standard Ethernet Cable

Don't let "power issues" delay implementation of IP Telephony. Instead of adding bulky individual AC power adapters to IP telephone sets, power up to 12 IP phones with the SN1604 Power Patch Panel and have one cable connection for data, voice and IP phone set power. Just one UPS unit can provide backup for one (or several co-located) SN1604 unit(s).

### Flexible Service Delivery

The SN1604 Power Patch Panel takes advantage of "spare pair" wiring in Ethernet cabling. In traditional TDM Telephony, the -48 VDC required for dial tone and ring voltage is delivered to the phone set through the same cable as the voice signals. Ethernet was only designed to transport low voltage data bits; however, most Ethernet cabling in current use contains an extra "spare pair" of wires which can be used to carry the -48 VDC. The NEC SN1604

Power Patch Panel uses those "spare pairs" to power up to 12 Dterm® IP sets. Although individual AC Power Adapter units can be used for the Dterm IP, the SN1604 supplies power from a single source, facilitating the use of a UPS system for centralized system backup. SN1604 units are generally co-located in a power closet alongside the LAN switch and the UPS unit.

- Supports NEC BlueFire™ and other standard Ethernet switches/hubs
- Uses "Spare Pair" in standard 10/100 Ethernet cabling
- Discovers IP phone set while auto-sensor prevents damage to other devices
- Independent overload and short circuit protection for each channel
- Status LED indicators for each channel



**SN1604 Power Patch Panel**

### SN1604 Power Patch Panel Features

- Single cable connection for data, voice and IP phone set power
- Continuous operation during power interruptions (with UPS)
- Centralized power at phone closet
- Simplifies facility management
- Eliminates bulky AC adapters
- Supports NEC INASET™, Dterm® with IP Adapter, and Dterm® IP phone sets

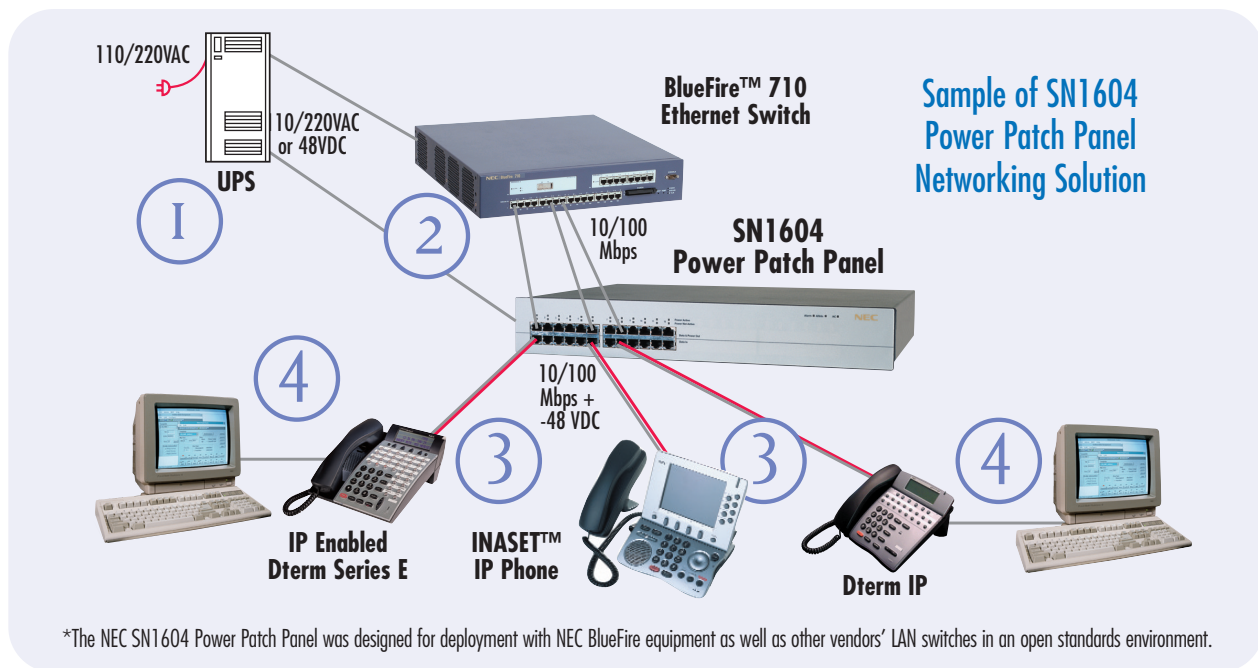
- 12 ports per unit
- Standard 19" 1.5 RU rack mountable

# SN1604 Power Patch Panel

Powers up to 12 Dterm IP Phone Sets

## Specifications

|                     |  |
|---------------------|--|
| Physical:           | Height: 2.6" 66 mm    Width: 17" 440 mm<br>Depth: 11.8" 300 mm    Weight: 8.3 lbs. 3.8 Kg  |
| Environmental:      | Operating: Temp. 0 to 40° C; Humidity 10 to 90% non-condensing<br>Storage: Temp. -20 to 70° C; Humidity 10 to 90% non-condensing   |
| Ethernet Interface: | Input (TRAFFIC): 12 Ports; 10/100 Mbps; RJ-45 female socket<br>Output (TRAFFIC & POWER): 12 Ports; 10/100 Mbps & -48 VDC; RJ 45 female socket with DC voltage on wire pairs 7-8 and 4-5  |
| Electrical:         | Input Voltage = 90 to 264 VAC (47-63 Hz) or -48 VDC<br>Input Current at 110 VAC = 3 Amperes<br>Total Power Consumption, Continuous, 12 Ports at full load = 300 Watts<br>Output Power, per Port = 15.8 Watts Max<br>Nominal Output Voltage per Port: AC Input: -48 VDC (-42 to -49.5 VDC)<br>DC Input: -48 VDC (-42 to -57 VDC)<br>Combined Regulation: -48 VDC (-42 to -57 VDC) |



1. UPS system provides power to both the LAN switch (BlueFire 710) and the SN1604. The SN1604 can accommodate power input of 110/220 VAC or 48 VDC.
2. Standard Ethernet cabling extends from the LAN switch to the SN1604. Each of the 12 ports or channels on the SN1604 has two RJ-45 connectors. The top connector receives the input from the LAN switch.
3. The bottom connector of each SN1604 port distributes the power (and the Ethernet signals) to the IP phone sets, utilizing the "spare pair" in the standard Ethernet cable.
4. All NEC IP phone sets have a built-in Ethernet switch which passes the data traffic on to the user's PC.

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To find out more about the SN1604 Power Patch Panel or to inquire about NEC's powerful and versatile IP products, visit our website at [www.cng.nec.com](http://www.cng.nec.com)



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