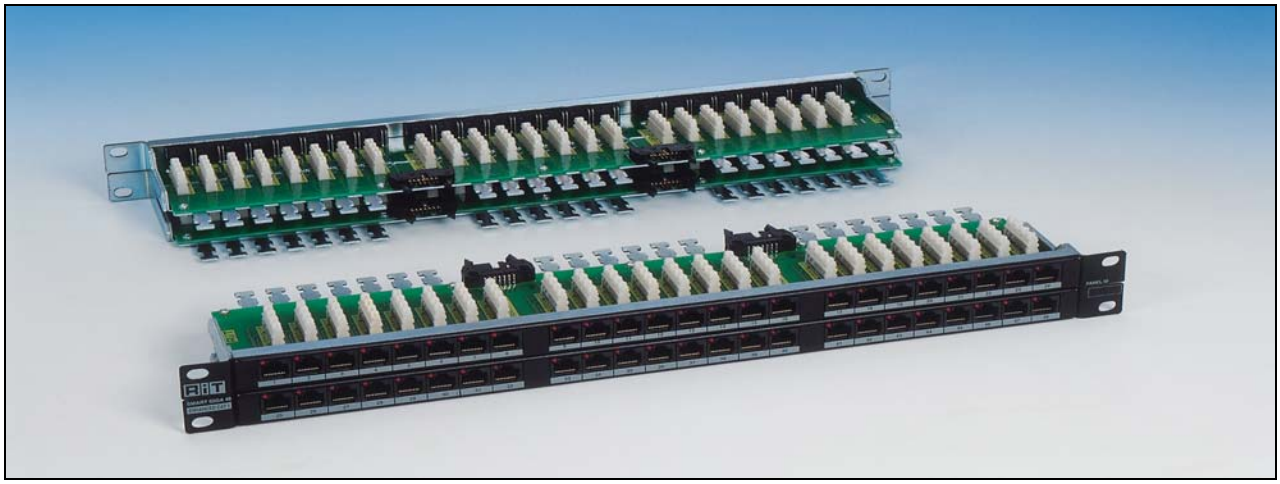
SMART Giga 48 Patch Panels (High Density 1U) -

Features



- Extremely high density Panel supports 48 ports and uses only 1U height of rack space
- Compatible to Unshielded Twisted Pairs (UTP) cabling systems
- Conforms to ANSI/TIA/EIA-568-B.2, ISO/IEC 11801 2nd edition (2002) and CENELEC EN50173 (2002) for Category 5e/Class D. Exceeds all Category 5e connecting hardware requirements
- Simple, labor saving assembly and installation
- Cable termination using 110 Block termination tool
- Provisions for cable routing and clamping with T-shaped anchors and cable-ties on back
- Compatible with 22-26 AWG solid or stranded wire cables
- High durability and reliability
- PatchView and non PatchView options
- Patent pending

SMART Giga 48 Patch Panels (High Density 1U) - *Features*

PatchView™ Capability

- Special SMART-Giga 48 model, when used in conjunction with RiT's PatchView System, are able to scan the wiring center configuration and subsequently report the connectivity status
- Patching information is displayed on the management station for cabling management applications
- LED indicators on panels identify any two ports patched together. Extremely useful for facilitating maintenance in mid-to-large size wiring centers which are over congested with patch cords
- Computerized LED displays guide the technician in performing Moves, Adds and Changes (MACs)

SMART Giga 48 Patch Panels (High Density 1U) -

Description

SMART Giga-48 UTP Panel is an innovative patch panel providing a high-density solution, especially designed to save rack and floor space while ensuring top Category 5e performance requirements. Provides RiT's worldwide - recognized PatchView Technology with a real-time cabling management system.

The SMART Giga-48 UTP Panel conforms to ANSI/TIA/EIA-568-B.2, ISO/IEC 11801 2nd edition (2002) and CENELEC EN50173 (2002) for Category 5e/Class D. Exceeds all Category 5e connecting hardware requirements.

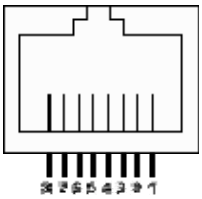
SMART Giga 48 Patch Panels (High Density 1U) - *Specifications*

Interface

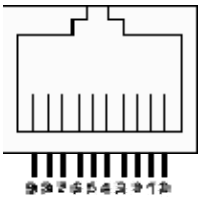
- **Front Interconnection (patch cords side)**
  48 eight or ten-position RJ-45 unshielded modular jacks.
- **Back Interconnection (cabling side)**
  48 eight-position 110 IDC blocks, accept 22 to 26 AWG wires, solid or stranded. Rated for up to a minimum of 200 retermination cycles.

Note: Termination tools must be ordered separately.

Front



Models with 8-Position
RJ-45 jacks



Models with 10-Position
RJ-45 jacks (for PatchView)

- **Cable Routing and Clamping**
  48 T-shaped anchors for clamping cables with cable-ties. 4.8 mm wide ties, such as PANDUIT P/N PLT 2S are recommended. Cable-ties can be ordered from RiT.

- **Interconnection to RiT's PatchView system (in selected models)**
  4 of the 14 pin headers on the back of the panel are used for connection to the PatchView Scanner. Select Scanner Attachment Cord according to the required length. The scanning signal is transmitted over pin 9 of the RJ-45. Pin 9 exists in special ten-position RJ-45 jack and plug designs used for these patch panel models. A special patch cord - SMART Jumper, including an extra wire and special RJ-45 plugs is needed. Please refer to the PatchView System and the Copper Cables and Cords sections for further details.

- **Indicators (in models adapted to PatchView only)**
  Port identification indicators - 48 red LEDs. Connected ports are identified by a pair of activated LEDs. A single port can be identified and the corresponding LED activated by a remote control command from the network management station.

SMART Giga 48 Patch Panels (High Density 1U) -

Specifications

Electrical Specifications

Category 5e

Standard

Conforms to ANSI/TIA/EIA-568-B.2, ISO/IEC 11801 2nd edition (2002) and CENELEC EN50173 (2002) for Category 5e/Class D.

Performance Requirements

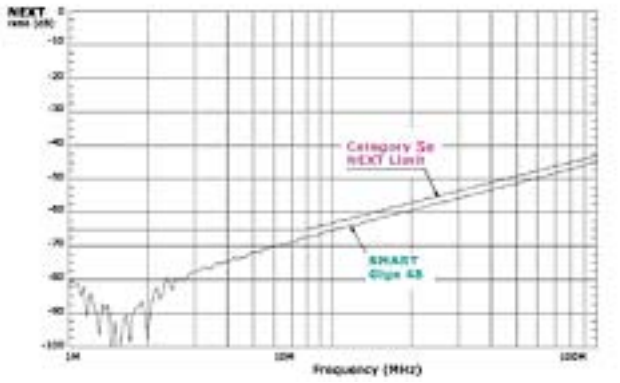
Meets all connecting hardware requirements

Electrical Performance

SMART-Giga 48 Patch Panels, 1U

NEXT ratio plot is shown for worst pair combination. The following are typical NEXT measurement results at 100 MHz for all pair combinations.

Pairs	NEXT (dB) 100 MHz
12-36	-49.87
12-45	-66.67
12-78	-53.71
36-45	-45.65
36-78	-44.6
45-78	-45.84



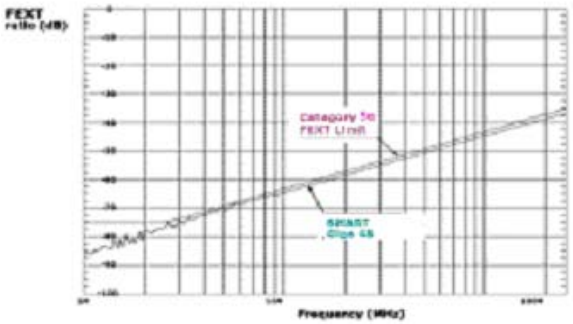
All pair combinations exceed Category 5e requirements.

SMART Giga 48 Patch Panels (High Density 1U) -

Specifications

FEXT ratio plot is shown for worst pair combination. The following are typical FEXT measurement results at 100 MHz for all pair combinations.

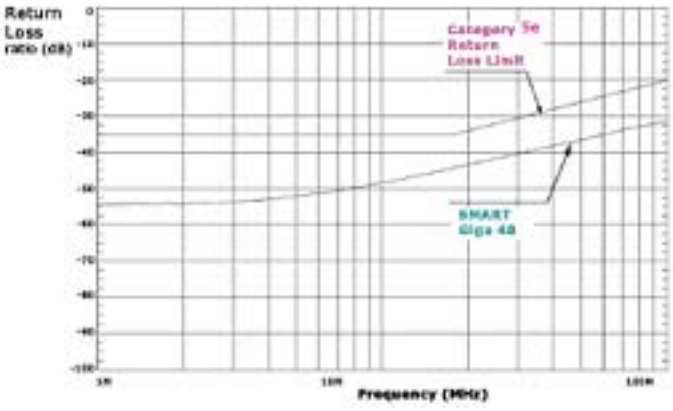
Pairs	FEXT (dB) 100 MHz
12-36	-41.7
12-45	-46.34
12-78	-55.89
36-45	-52.08
36-78	-53.57
45-78	-44.51



All pair combinations exceed Category 5e requirements.

Return Loss ratio plot is shown for worst pair. The following are typical Return Loss measurement results at 100 MHz for all pairs.

Pairs	Return Loss (dB) 100 MHz
1-2	-32.990
3-6	-34.540
4-5	-33.840
7-8	-31.260



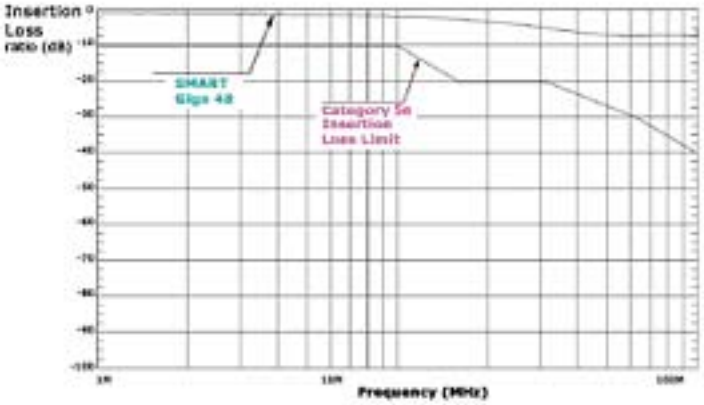
All pair combinations exceed Category 5e requirements.

SMART Giga 48 Patch Panels (High Density 1U) -

Specifications

Insertion Loss ratio plot is shown for worst pair. The following are typical Insertion Loss measurement results at 100 MHz for all pairs.

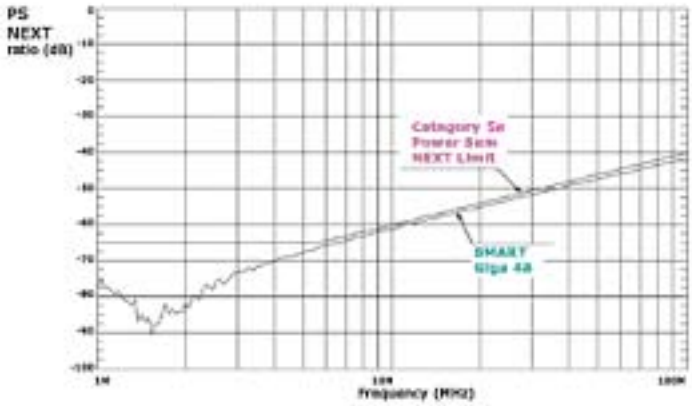
Pairs	Insertion Loss (dB) 100 MHz
1-2	-0.055
3-6	-0.076
4-5	-0.069
7-8	-0.072



All pair combinations exceed Category 5e requirements.

PowerSum NEXT ratio plot is shown for worst pair. The following are typical Power Sum NEXT measurement results at 100 MHz for all pairs.

Pairs	Power Sum NEXT (dB) 100 MHz
1-2	-48.3
3-6	-41.42
4-5	-42.71
7-8	-41.87



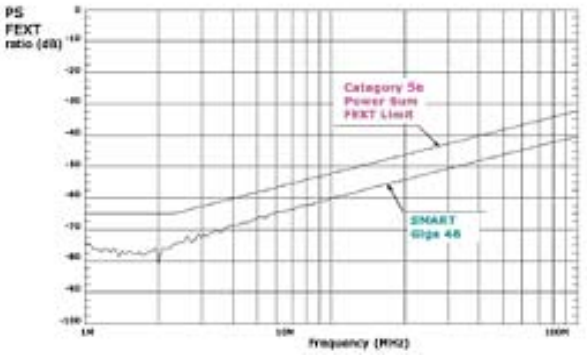
All pairs exceed Category 5e requirements.

SMART Giga 48 Patch Panels (High Density 1U) -

Specifications

PowerSum FEXT ratio plot is shown for worst pair. The following are typical Power Sum FEXT measurement results at 100 MHz for all pairs.

Pairs	Power Sum FEXT (dB) 100 MHz
1-2	-40.3
3-6	-41.07
4-5	-41.88
7-8	-43.73



All pairs exceed Category 5e requirements.

General

- **Physical**

  Height: 44.0 mm / 1.73" (1U)

  Width: 482.6 mm / 19"

  Depth: 114.0 mm / 4.8"

  Weight:1.9 kg

- **Material**
  Steel SAE 1020

- **Colors**
  Black background with gray silk screened markings

- **Environment**
  Temperature: -40° to 85°C
  Humidity: 0-90% non-condensing

- **Compliance with International EMC Standards:**
  The SMART 24 line of patch panels is designed to comply with EN-55022, Class B (Europe) and FCC Part 15, Subpart J, Class A (USA).