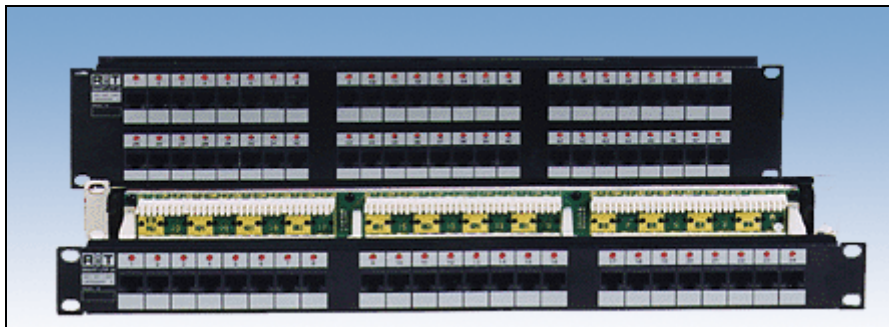


SMART Giga 24/48 UTP Patch Panels -

Features



- UTP 24 - 1U high - 24 ports
UTP 48 - 2U high - 48 ports
- High performance, supports 100 MHz data rates.
- Conform to ANSI/TIA/EIA-568-B.2, ISO/IEC 11801 2nd edition (2002) and CENELEC EN50173 (2002) for Category 5e/Class D.
- Cable termination using 110 Block termination tool
- Compatible with 22-26 AWG solid or stranded wires
- Models with optional cable retention fixture for enhanced strain relief and cable management available
- High durability and reliability
- PatchView and non-PatchView options
- Patent pending

SMART Giga 24/48 UTP Patch Panels - *Features*



PatchView™ Capability

- Special SMART Giga UTP 24/48 models, 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 when performing Moves, Adds and Changes (MACs).

SMART Giga 24/48 UTP Patch Panels -

Description

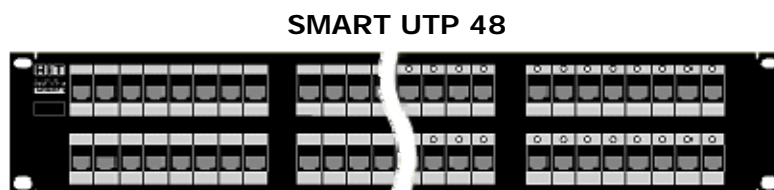
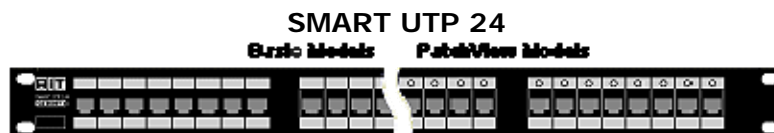


The RiT SMART Giga UTP 24/48 line of data communications patch panels is a cost effective solution for high density cross-connect equipment in today's high performance computing environment. SMART Giga UTP 24/48 feature a wide variety of models which cover many different applications and customer requirements, including modern voice systems.

With the ever increasing need for faster data transmission rates, these panels minimize cross-talk, and insertion-loss, and exceed Category 5e (100 MHz) performance.

Special SMART Giga UTP models, when used in conjunction with RiT's PatchView system, are able to perform remote or on-site scanning of the patching configuration. The entire wiring center's patching configuration is continuously monitored by a scanner which reports the data to a remote terminal. The network administrator uses this data as a vital part of his cabling management system. The data may be displayed on the panel itself by LED indicators.

Servicing time is dramatically reduced as computerized LED displays guide the technician when performing Moves, Adds and Changes (MACs).



SMART Giga 24/48 UTP Patch Panels - *Specifications*



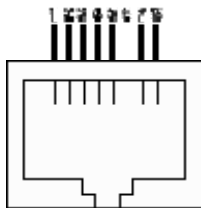
Interface

- **Front Interconnection (patch cords side)**
- **Back Interconnection (cabling side)**

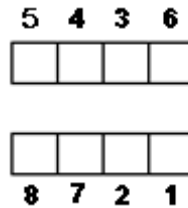
24/48 eight-position 110 IDC blocks, accept 22 to 26 AWG wires, solid or stranded. Rated for up to a minimum of 200 retermination cycles.

Note: Termination tools must be ordered separately.

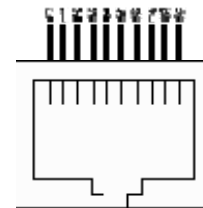
SMART-Giga UTP 24/48



Models with 8-Position
RJ-45 jacks



Pin arrangement for a port



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

- **Cable Routing and Clamping**

Cable management clamps on the back side of the panel provide cable routing. An optional cable retention fixture is available for enhanced cable strain relief using cable ties. 4.8mm wide ties, such as PANDUIT P/N PLT 25, are recommended. Cable-ties can be ordered from RiT.

- **Interconnection to RiT's PatchView system (in selected models)**

Two 14-pin headers on the back of the panel are used for connection to the PatchView Scanner. Select Scanner to Group B Patch Panel Attachment Cord according to the required length. The scanning signal is transmitted over pin 9 of the RJ-45. Pin 9 exists in 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.

- **Indicators (in models adapted to PatchView only)**

Port identification indicators - 24/48 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 24/48 UTP Patch Panels - *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

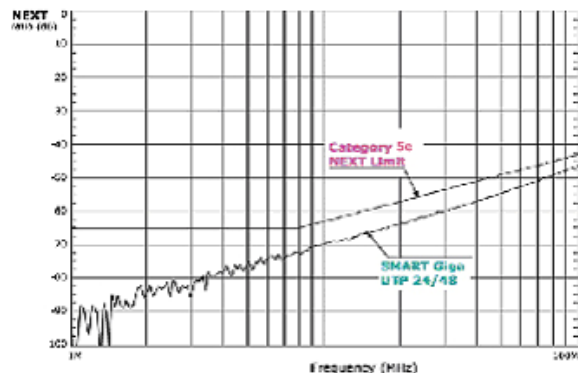
Meets all connecting hardware requirements

Electrical Performance

SMART-Giga UTP 24/48 Patch Panels

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	-53.02
12-45	-49.22
12-78	-65.19
36-45	-46.28
36-78	-48.23
45-78	-50.12



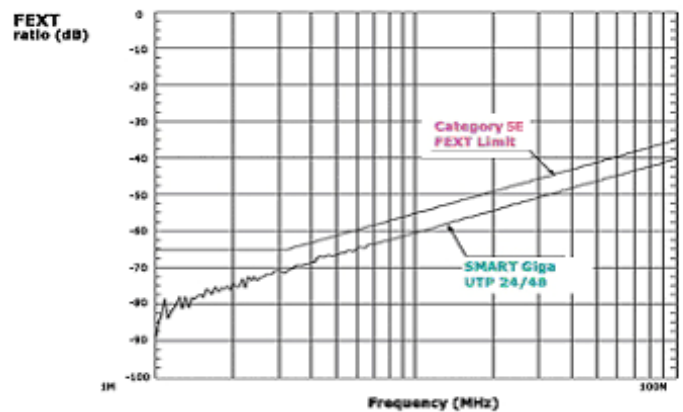
All pair combinations exceed Category 5e requirements.

SMART Giga 24/48 UTP Patch Panels - *Specifications*



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

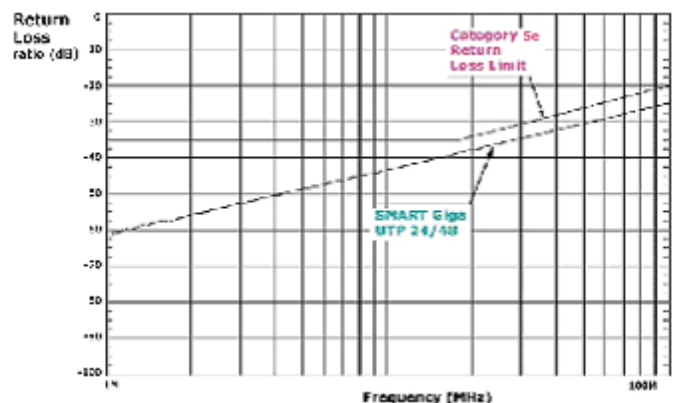
Pairs	FEXT (dB) 100 MHz
12-36	-51.59
12-45	-40.27
12-78	-55.5
36-45	-41.06
36-78	-49.16
45-78	-44.96



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	-25.88
3-6	-34.06
4-5	-29.76
7-8	-24.77



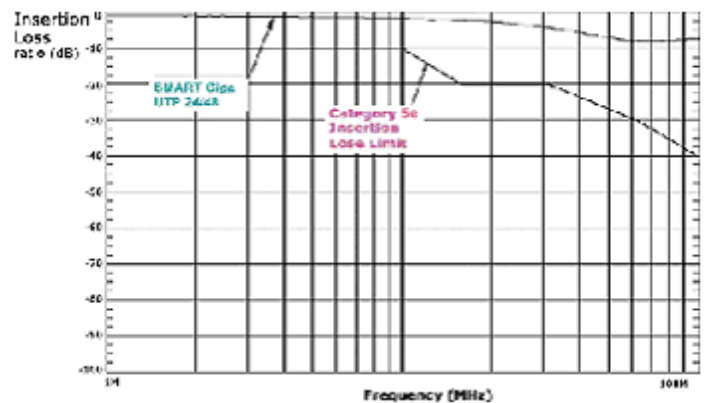
All pair combinations exceed Category 5e requirements.

SMART Giga 24/48 UTP Patch Panels - *Specifications*



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

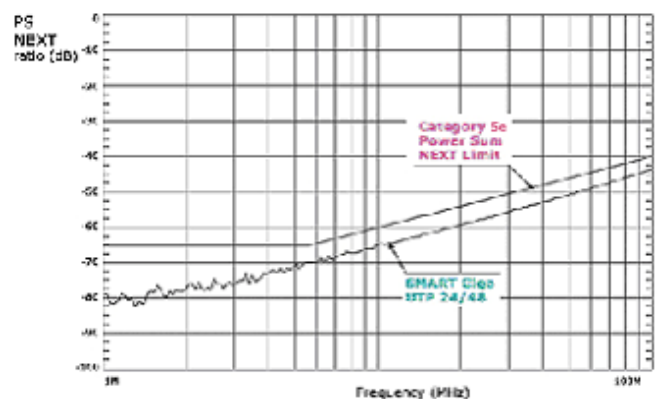
Pairs	Insertion Loss (dB) 100 MHz
1-2	-0.066
3-6	-0.057
4-5	-0.062
7-8	-0.073



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	-47.63
3-6	-43.61
4-5	-43.44
7-8	-46.01



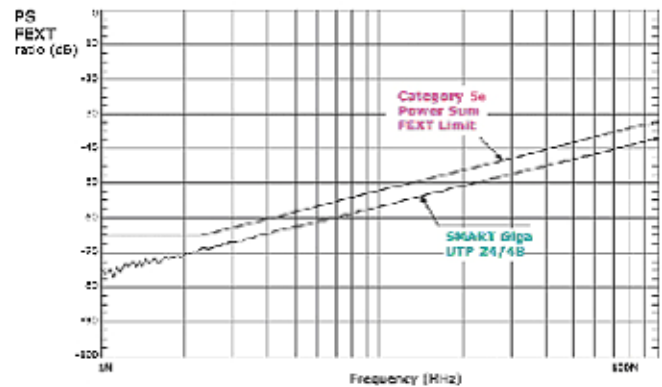
All pairs exceed Category 5e requirements.

SMART Giga 24/48 UTP Patch Panels - *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	-39.85
3-6	-40.11
4-5	-36.9
7-8	-43.29



All pairs exceed Category 5e requirements.

General

■ Physical

SMART Giga UTP 24

Height: 44.0 mm / 1.75" (1U)
 Width: 482.6 mm / 19"
 Depth: 35.0 mm / 1.375"
 Depth with Cable Retention
 Fixture: 91.0 mm / 3.58"
 Weight: 0.46 kg (1.0 lb)

SMART Giga UTP 48

Height: 88.0 mm / 3.5" (2U)
 Width: 482.6 mm / 19"
 Depth: 5.0 mm / 1.375"
 Depth with Cable Retention
 Fixture: 91.0 mm / 3.58"
 Weight: 0.85 kg (1.9 lb)

SMART Giga 24/48 UTP Patch Panels - *Specifications*



- **Material**
Aluminum
- **Colors**
Black background with gray silk screened markings
- **Environment**
Temperature: -40° to 85°C
Humidity: 0-90% non-condensing