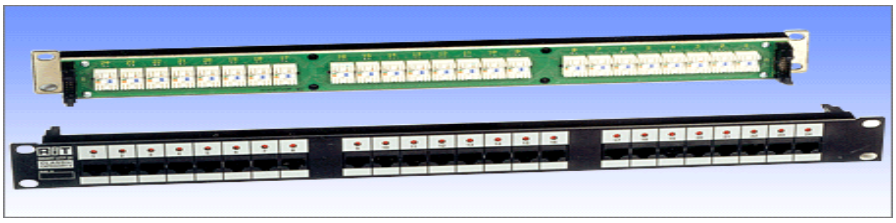
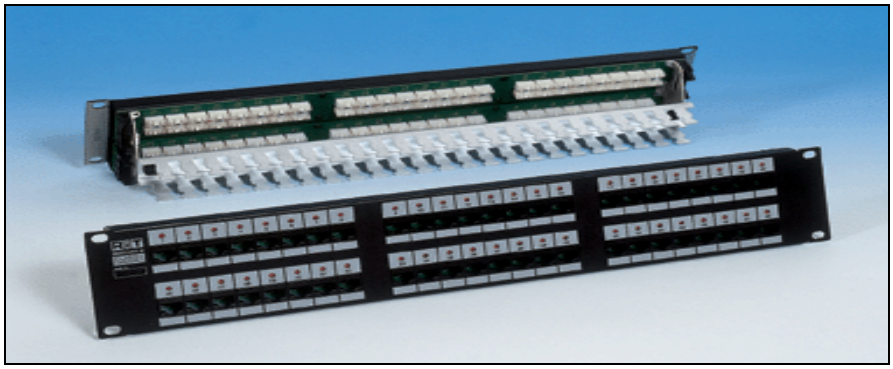
SMART CLASSix 24/48 UTP Patch Panels -

Features





- Support 24 ports per 1U, 48 ports per 2U.
- Conform to ANSI/TIA/EIA-568-B.2-1, ISO/IEC 11801 2nd edition (2002) and CENELEC EN50173 (2002) for Category 6/Class E.
- Simple labor-saving termination using standard 110 Block termination tool
- Enhanced cable retention fixture
- Unique assembly fixture
- Color coded wiring blocks, compatible with both T568A and T568B wiring options
- Backward compatible with Category 5e and Category 5 cabling standards
- Supports solid and stranded 22-26 AWG wires
- PatchView and non-PatchView options

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

CLASSix™

RiT SMART CLASSix UTP Patch Panels are part of the RiT SMART CLASSix Cabling System™, featuring Category 6 performance. The system is designed to conform to ANSI/TIA/EIA-568-B.2-1, ISO/IEC 11801 2nd edition (2002) and CENELEC EN50173 (2002) for Category 6/Class E.

PatchView™ Capability

- Special SMART CLASSix UTP 24/48 Patch Panels 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 CLASSix 24/48 UTP Patch Panels -

Description

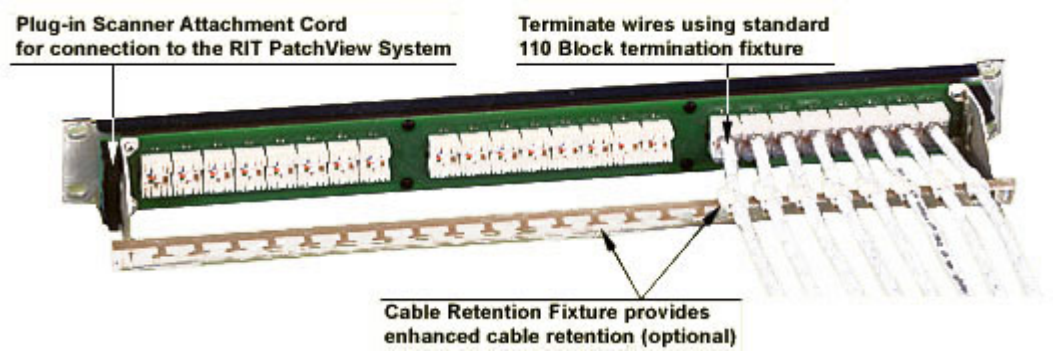
The RiT SMART CLASSix UTP line of data communications patch panels meets the requirements for high-performance Category 6 network components. The panels conform to ANSI/TIA/EIA-568-B.2-1, ISO/IEC 11801 2nd edition (2002) and CENELEC EN50173 (2002) for Category 6/Class E, and are designed for high-speed applications such as ATM 622 Mbps, Gigabit Ethernet 1000 Mbps and future high-speed applications.

The panels are optimized for ease of assembly and termination. With simple labor-saving termination using standard 110 Block termination tools and color-coded wiring blocks, installation costs are significantly reduced. A unique assembly fixture is available for supporting the panel during assembly.

Special SMART CLASSix 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 CLASSix UTP 24 - Back View



SMART CLASSix 24/48 UTP Patch Panels -

Specifications

Interface

- **Front Interconnection (patch cord side)**
  24/48 eight-position or nine-position RJ-45 unshielded modular jacks. Use of patch cords with RiT CLASSix RJ-45 plugs is recommended.
- **Back Interconnection (cabling side)**
  24/48 eight-position 110 tool-compatible blocks, accept 22 to 26 AWG wires, solid or stranded. Rated for up to a minimum of 200 retermination

  Note: Termination tools must be ordered separately.
- **Cable Routing and Clamping**
  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. Cables-ties can be ordered from RiT.

- **Interconnection to RiT's PatchView system (in selected models)**
  Two 14-pin headers on the back of the PV panel are used for connection to PatchView Scanners. There is only one 14-pin header on PVMax panels. 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 nine-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 CLASSix 24/48 UTP Patch Panels -

Specifications

Electrical Specifications

Category 6 / CLASS E

Standard

Conforms to ANSI/TIA/EIA-568-B.2-1, ISO/IEC 11801 2nd edition (2002) and CENELEC EN50173 (2002) for Category 6/Class E.

Performance Requirements

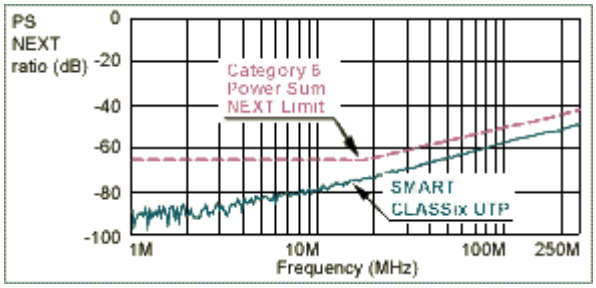
Meets all connecting hardware requirements

Electrical Specifications

SMART CLASSix UTP Patch Panel

PowerSum NEXT ratio plot is shown for worst pair. The following are typical Power Sum NEXT measurement results at 100, 200 and 250 MHz for all pairs.

Pair (to all other pairs)	PowerSum NEXT (dB)		
	100 MHz	200 MHz	250 MHz
1-2	-60.0	-50.3	-46.4
3-6	-56.3	-48.3	-44.9
4-5	-55.8	-50.6	-48.0
7-8	-58.9	-51.1	-48.3



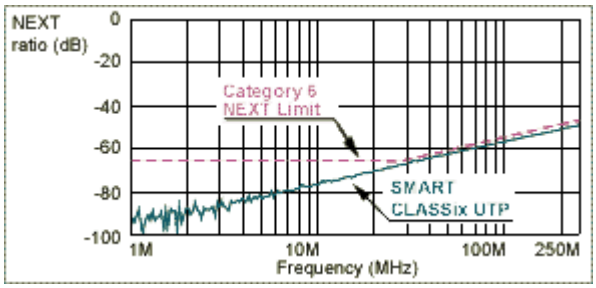
All pairs exceed Category 6 requirements.

SMART CLASSix 24/48 UTP Patch Panels -

Specifications

NEXT ratio plot is shown for worst pair combination. The following are typical NEXT measurement results at 100, 200 and 250 MHz for all pair combinations.

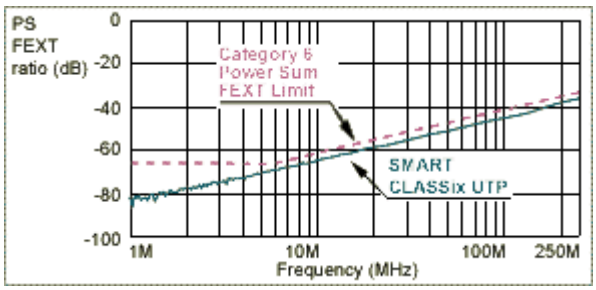
Pair Combination	NEXT (dB) 100 MHz	200 MHz	250 MHz
1-2 & 3-6	-62.7	-52.5	-48.3
1-2 & 4-5	-63.6	-55.2	-51.9
1-2 & 7-8	-74.8	-61.9	-58.1
3-6 & 4-5	-58.6	-54.1	-51.8
3-6 & 7-8	-63.4	-52.7	-49.7
4-5 & 7-8	-60.9	-57.4	-55.6



All pairs combinations exceed Category 6 requirements.

PowerSum FEXT ratio plot is shown for worst pair. The following are typical Power Sum FEXT measurement results at 100, 200 and 250 MHz for all pairs.

Pair (to all other pairs)	PowerSum FEXT (dB) 100 MHz	200 MHz	250 MHz
1-2	-47.1	-41.1	-39.3
3-6	-61.1	-48.5	-45.9
4-5	-43.8	-37.2	-35.1
7-8	-46.4	-39.4	-37.2

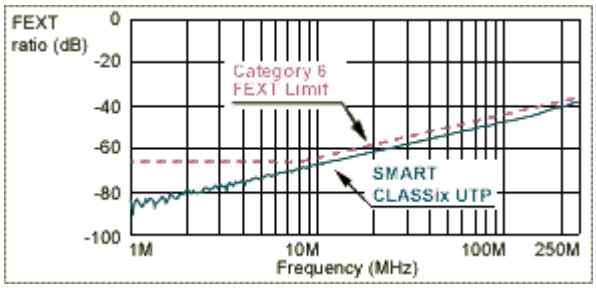


All pairs exceed Category 6 requirements.

SMART CLASSix 48 1 UTP Patch Panels (High Dendity) - *Specifications*

FEXT ratio plot is shown for worst pair combination. The following are typical FEXT measurement results at 100, 200 and 250 MHz for all pair combinations.

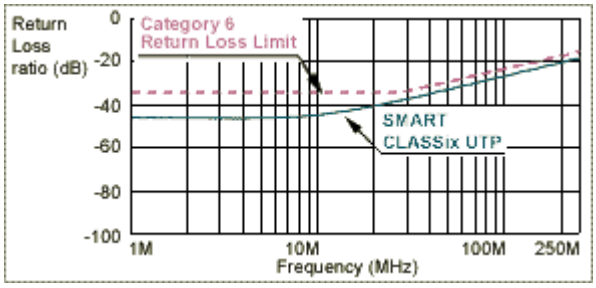
Pair Combination	FEXT (dB) 100 MHz	200 MHz	250 MHz
1-2 & 3-6	-71.8	-57.0	-54.5
1-2 & 4-5	-47.1	-41.3	-39.5
1-2 & 7-8	-66.9	-58.3	-55.4
3-6 & 4-5	-68.5	-50.9	-48.1
3-6 & 7-8	-62.4	-54.1	-51.6
4-5 & 7-8	-46.5	-39.6	-37.4



All pair combinations exceed Category 6 requirements.

Return Loss ratio plot is shown for worst pair. The following are typical Return Loss measurement results at 100, 200 and 250 MHz for all pairs.

Pair (to all other pairs)	Return Loss (dB) 100 MHz	200 MHz	250 MHz
1-2	-37.9	-30.8	-28.1
3-6	-35.9	-27.2	-24.4
4-5	-27.2	-21.0	-19.1
7-8	-41.6	-32.0	-28.6



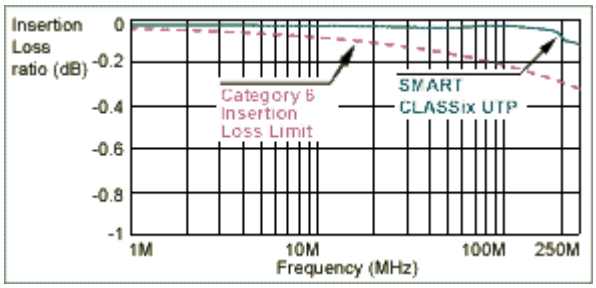
All pairs exceed Category 6 requirements.

SMART CLASSix 24/48 UTP Patch Panels

Specifications

Insertion Loss ratio plot is shown for worst pair. The following are typical Attenuation measurement results at 100, 200 and 250 MHz for all pairs.

Pair (to all other pairs)	Insertion Loss (dB) 100 MHz	200 MHz	250 MHz
1-2	0.00152	-0.0557	-0.14
3-6	-0.00594	-0.0623	-0.16
4-5	0.0178	-0.0903	-0.26
7-8	-0.00648	-0.0658	-0.1



All pairs exceed Category 6 requirements.

General

- **Physical**

	24 Ports	48 Ports
Height:	44.0 mm / 1.75" (1U)	88.0 mm / 3.5" (2U)
Width:	482.6 mm / 19"	
Depth:	35.0 mm / 1.375"	
Depth with Cable Retention Fixture:	91.0 mm / 35.8"	
Weight:	0.46 kg (1.0 lb)	0.92 kg (2.02b)

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