SMART CLASSix 24 STP Patch Panels -
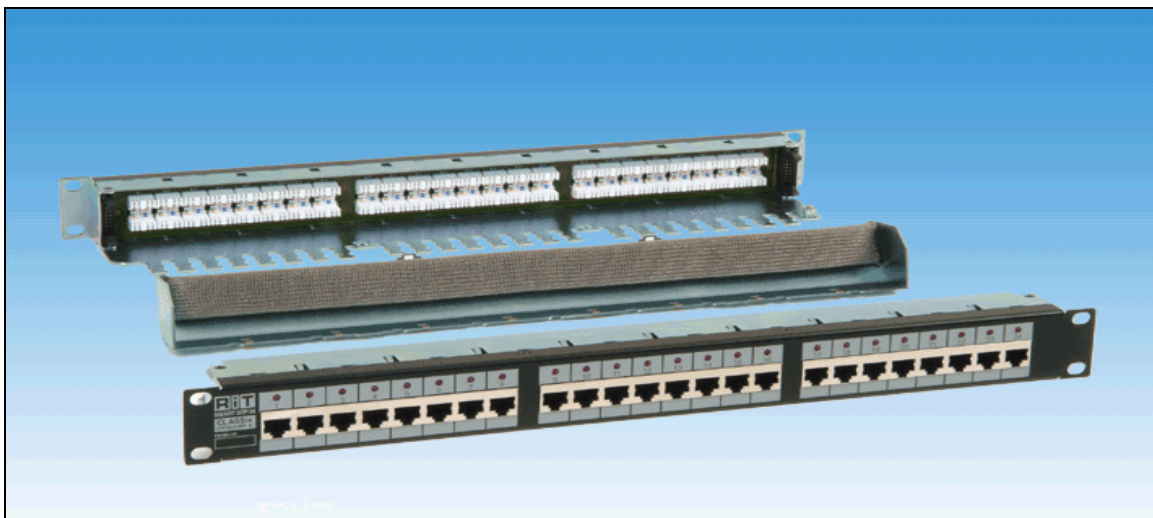
Features

- Support 24 ports per 1U

- High performance panels that supports all Category 6 connecting hardware performance specifications up to 250 MHz

- 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 Krone Block termination tools

- Excellent provisions for terminating shielded cables

- Enhanced cable retention fixture

- Sealed casing for superior EMI/RFI protection for shielded model panels

- Compatible with 22-26 AWG solid or stranded wire cables

- High durability and reliability

- PatchView and non PatchView options

- Meets the transfer impedance standard requirement

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Page 1 of 8

SMART CLASSix 24 STP
Patch Panels -
Features

CLASSix™

RiT SMART CLASSix STP Patch Panels are part of the RiT SMART CLASSix Cabling System™, featuring Category 6 performance. The system is designed to Conforms 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

- SMART-CLASSix 24 Panels, when used in conjunction with RiT's PatchView System, can scan the wiring center configuration and subsequently report the connectivity status

- Patching information is displayed on the management station for cabling management and control

- 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-display guides the technician in performing Moves, Adds and Changes (MACs)

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Page 2 of 8

SMART CLASSix 24 STP
Patch Panels -
Description

SMART CLASSix 24 STP patch panels offer high quality patching solutions that are made to last. The robust panels exceed all Category 6 connecting hardware requirements and fully integrate STP cabling systems. Provides RiT's worldwide-recognized PatchView™ Technology with a real-time cabling management system.

The RiT SMART CLASSix STP 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 Krone 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 STP 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).

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Page 3 of 8

SMART CLASSix 24 STP
Patch Panels -
Specifications

Interface

■ **Front Interconnection (patch cord side)**
24 eight or nine-position RJ-45 shielded modular jacks. Use of patch cords with RiT CLASSix RJ-45 plugs is recommended.

■ **Back Interconnection (cabling side)**
24 eight-position Krone tool-compatible blocks; accept 23 to 26 AWG wires, solid or stranded. Rated for up to a minimum of 200 re termination cycles.

Note: Termination tools must be ordered separately.

■ **Interconnection to RiT's PatchView system**

   o **PV Panels -** Two 14-pin headers on the back of the panel are used for connection to the PV or PVMax Scanner.

   o **PVMax Panels -** One 14-pin header on the back of the panel is used for connection to the PVMax Scanner.

   o Select **Group B** Scanner Attachment Cord according to the required length.

   o 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. 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 - 24 red LEDs. A pair of activated LEDs identifies connected ports. A single port can be identified and the corresponding LED activated by a remote control command from the network management station.

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Page 4 of 8

SMART CLASSix 24 STP
Patch Panels -
Specifications

Electrical Specifications

Category 6 / CLASS E

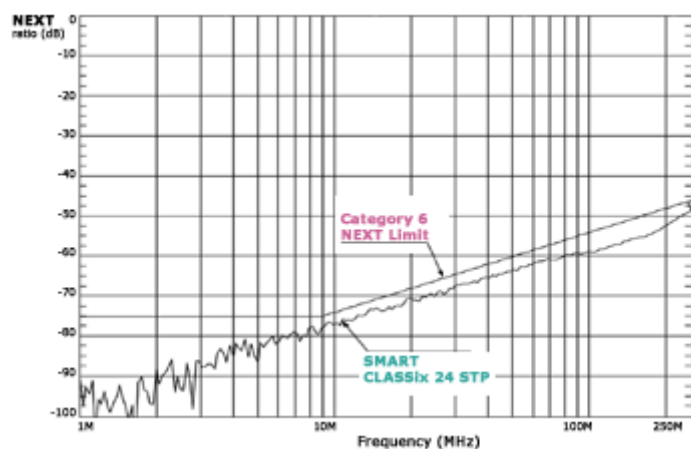| Standard	Performance Requirements
Conforms to ANSI/TIA/EIA-568-B.2-1, ISO/IEC 11801 2nd edition (2002) and CENELEC EN50173 (2002) for Category 6/Class E.	Meets all connecting hardware requirements

Electrical Specifications

SMART CLASSix STP Patch Panel

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.

Pairs	NEXT (dB)		
	100 MHz	200 MHz	250 MHz
12-36	-58.86	-52.21	-48.49
12-45	-57.65	-53.37	-50.18
12-78	-57.39	-55.9	-53.42
36-45	-64.28	-62.99	-53.3
36-78	-61.65	-56.25	-54.52
45-78	-57.66	-54.43	-50.69

All pairs combinations exceed Category 6 requirements.

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Page 5 of 8

SMART CLASSix 24 STP
Patch Panels -
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.
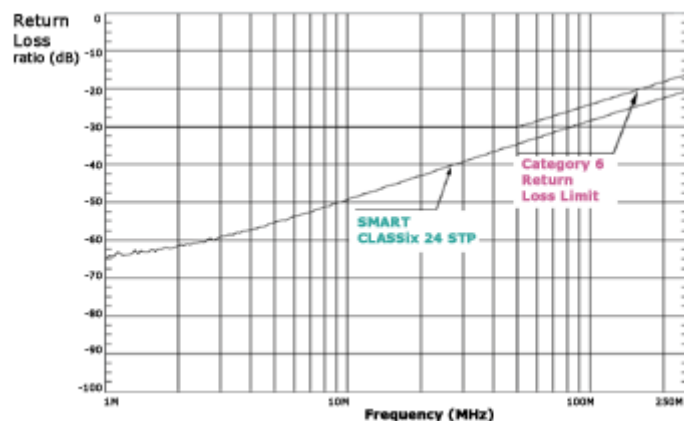
Pairs	FEXT (dB)		
	100 MHz	200 MHz	250 MHz
12-36	-50.41	-47.46	-45.46
12-45	-46.62	-41.79	-39.76
12-78	-69.34	-67.67	-66.54
36-45	-44.35	-38.35	-36.88
36-78	-63.85	-57.84	-59.39
45-78	-44.33	-38.56	-36.93
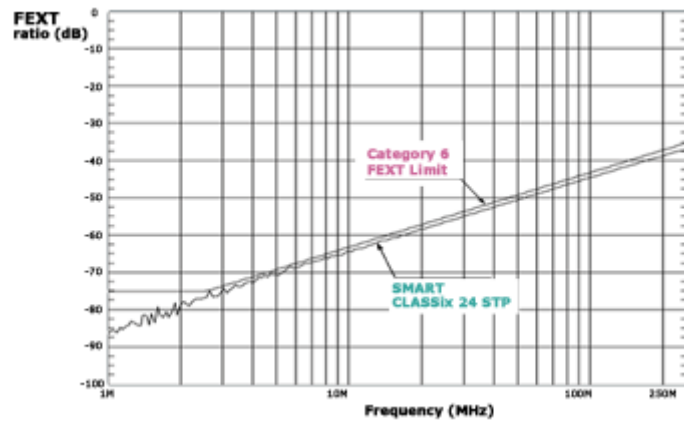
All pairs combinations exceed Category 6 requirements.

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.

Pairs	Return Loss (dB)		
	100 MHz	200 MHz	250 MHz
1-2	-46.40	-35.57	-31.70
3-6	-34.03	-28.06	-26.19
4-5	-28.25	-22.32	-20.42
7-8	-34.03	-27.25	-25.03

All pairs exceed Category 6 requirements

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Page 6 of 8

SMART CLASSix 24 STP
Patch Panels -
Specifications

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

Pairs	Insertion Loss (dB)		
	100 MHz	200 MHz	250 MHz
1-2	-0.033	-0.090	-0.120
3-6	-0.048	-0.102	-0.123
4-5	-0.046	-0.092	-0.131
7-8	-0.033	-0.060	-0.120
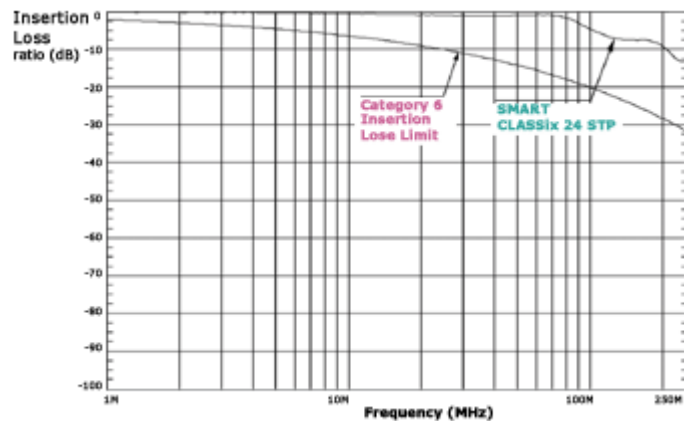
All pairs exceed Category 6 requirements.

General

■ **Physical**

Height:	44.2 mm / 1.74" (1U)
Width:	482.6 mm / 19"
Depth:	35.0 mm / 1.375"
Depth with Cable	
Retention Fixture:	89.15mm / 3.5"
Weight including package:	1.5 kg

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Page 7 of 8

SMART CLASSix 24 STP
Patch Panels
Specifications

- **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 CLASSix STP 24 line of patch panels is designed to comply with EN-55022, Class B (Europe) and FCC Part 15, Subpart J, Class A (USA).

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Page 8 of 8