

# 4000 Series Modular Panels

## Copper :: DSX-1 and Multifunction Solutions

### Overview

Actively manage network growth and change with Telect's 4000 Series panels. Available as fully configured T1/E1 DSX panels, modular DSX systems, or as multifunctional solutions, 4000 Series panels offer high density and versatile connectivity for a multitude of applications.

#### High-Density T1/E1 DSX Panels

Choose from front cross-connect, total front access, or wall-mount panels—all 4000 Series configurations feature high density and excellent cable management. The industry's first 84-termination/23-inch and 64-termination/19-inch panels, 4000 Series solutions can also be ordered pre-wired for rapid installation and service turn-up.

#### Multifunctional Solutions

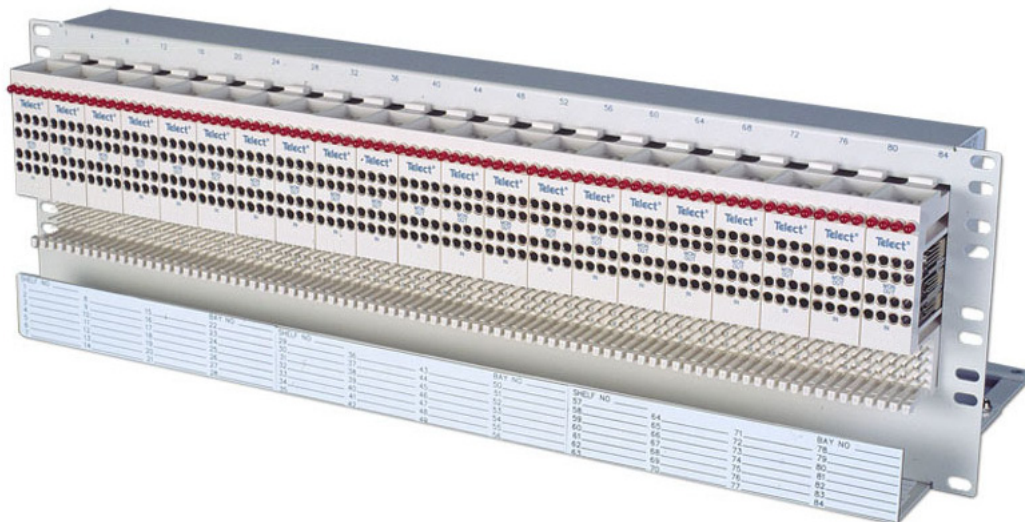
Modular 4000 Series panels provide a versatile, fully configurable platform for signal management, in a variety of front cross-connect, total front access, and wall-mount chassis. Module options include T1 or E1 DSX, DSX-3, fiber patch, power distribution, T1 interconnect, T1 repeater, customer interface and more. As your needs shift, simply snap in different modules to handle system functions.

### Primary Benefits

- Available as high-density loaded DSX-1 panels for quick deployment
- Modular platform enables cost deferral and customization—purchase connectivity modules when circuits are ready to earn revenue
- Individual modules snap into chassis and connect immediately to power for quick start-up
- Single circuit removable DSX-1 jacks allow jack maintenance without disrupting other circuits or requiring any I/O cabling changes
- DSX-1 Modules utilize Telect's patented Dedicated Digital Jacks™ for a lifetime of reliable connections
- Multifunctional capabilities enable versatile connectivity in a single chassis
- Backed by Telect's lifetime warranty

### Applications

- Loaded bays in central offices
- Individual panels for lower capacity applications
- Wall-mount/total front access panels for customer premise and other limited-space environments
- Multifunction configurations for low circuit count applications—wireless base stations, remote sites, customer demarcation, ISP
- DSX-1, DSX-3, customer handoff, fiber patch, loopback and more



# 4000 Series Modular Panels

## Copper :: DSX-1 and Multifunction Solutions

### Ordering Information

Description	Dimensions (W x H x D)	Part Number	Description	Part Number
<b>Loaded Front Cross-Connect Panels</b>			<b>Modules</b>	
28-term., 7 modules, des. 1-28	23 in. x 5.25 in. x 8.3 in.	010-4028-0001	4-term. DSX-1	010-4004-0000
56-term./5.25-in., 14 modules, des. 1-56	19 in. x 5.25 in. x 8.3 in.	010-4056-4006	4-term. DSX-1 with +24V red LEDs	010-4004-0002
56-term./7-in., 14 modules, des. 1-56	19 in. x 7 in. x 8.3 in.	010-4056-4016	4-term. E1 DSX	010-4004-E100
64-term./5.25-in., 16 modules, des. 1-64	19 in. x 5.25 in. x 8.3 in.	010-4064-4000	8-term. T1 interconnect module, wire-wrap and RJ48C, Bantam jacks	010-7108-0001
64-term./7-in., 16 modules, des. 1-64	19 in. x 7 in. x 8.3 in.	010-4064-4010	1-term. DSX-3, mini-WECO jacks, rear BNCs	010-9401-0401
64-term./7-in., 16 modules, des. 1-64, w/23-in. adapter brackets	19/23 in. x 7 in. x 8.3 in.	010-4064-4014	2-term. DS3 MPOP	010-9401-0402
84-term./7-in., 21 modules, des. 1-84	23 in. x 7 in. x 8.3 in.	010-4084-4011	6-position single mode FC fiber patch	015-4000-2010
84-term./7-in. 21 modules, des. 1-84, with rear tie-down bar	23 in. x 7 in. x 8.3 in.	010-4084-4012	6-position single mode ST fiber patch	015-4000-3010
<b>Total Front Access</b>			T1 Dual repeater, Bantam jacks	710-4002-0001
16-term., 4 module capacity, no power bus, side entry	6 in. x 7 in. x 8 in.	010-0000-4022	T1 Loopback, temperature hardened	710-4004-0003
36-term., 9 module capacity	11 in x 7 in. x 8 in.	010-0000-4020	T1 Loopback, commercial temperature rating	710-4004-0005
64-term., loaded, des. 1-64	19 in. x 7 in. x 4.2 in.	010-4264-0001RE	6-position GMT fuse module, +24V/-48V, 40A	009-4000-0001
84-term., loaded, des. 1-84	23 in. x 7 in. x 4.2 in.	010-4284-0001RE	4-position wire-wrap customer interface	005-4002-0128
<b>Empty Chassis</b>			4-position wire-wrap customer interface, XMT & RCV	005-4002-0168
<b>19-Inch</b>			4-position wire-wrap customer interface, 200 pin	005-4002-0204
56-term./5.25-in., 14 module capacity	19 in. x 5.25 in. x 8.3 in.	010-0000-4006	100-termination pin block	005-4000-0100
56-term./7-in., 14 module capacity	19 in. x 7 in. x 8.3 in.	010-0000-4016	200-termination pin block	005-4000-0200
64-term./5.25-in., 16 module capacity	19 in. x 5.25 in. x 8.3 in.	010-0000-4000	<b>Accessories</b>	
64-term./7-in., 16 module capacity	19 in. x 7 in. x 8.3 in.	010-0000-4010	Wall-mount kit for 19-in. or 23-in. front cross-connect chassis	999-0041-0075
<b>23-Inch</b>			Single Bantam patch cords	040-1000-xxx
84-term./5.25-in., 21 module capacity	23 in. x 5.25 in. x 8.3 in.	010-0000-4001	Dual Bantam patch cords	040-2000-xxx
84-term./7-in., 21 module capacity	23 in. x 7 in. x 8.3 in.	010-0000-4011	Bantam looping plugs	040-3000-0000
84-term./7-in., 21 module capacity, with tie-down bar	23 in. x 7 in. x 8.3 in.	010-0000-4012	5-conductor cross-connect wire, 1000' reel	060115

xxx = feet

# 4000 Series Modular Panels

## Copper :: DSX-1 and Multifunction Solutions

### Specifications

#### DSX-1 Jacks

##### Test Method

Dedicated Digital Jack	Unless otherwise specified, all appropriate products are tested under MIL-J-641, method 202F
------------------------	--

##### Electrical

Insertion Loss	< -0.5 dB (at 1.576 MHz)
Crosstalk	< -60 dB
Return Loss	< -26 dB at 772 kHz
Contact Resistance	< 0.01 ohms
Characteristic Impedance	Standard DSX-1 Products: 100 ohms

##### Mechanical

Insertion Force	4.17 lb (1.9 kg) average
Withdrawal Force	5.21 lb (2.4 kg) average
Life	Minimum 20,000 insertion/withdrawal cycles
Vibration	Per MIL-STD-202F, method 201A

##### Environmental

Salt Spray	Per MIL-STD-202F, method 101D
Moisture Resistance	Per MIL-STD-202F, method 106E
Thermal Limits	-40 to 149°F (-40 to 65°C) operating -67 to 185°F (-55 to 85°C) non-operating
Thermal Shock	Per MIL-STD-202, method 107D
Humidity	0% to 95% operating and non-operating

#### Meets Or Exceeds The Following Tests

DC Insulation Resistance	TA-EOP-000321
DC Current	TR-NPL-000320
Contact Resistance and Jack Insertions	TA-EOP-000321
Insertion Loss	TR-NPL-000320
Monitor Jack Level	TR-NPL-000320
Crosstalk	TR-NPL-000320
Return Loss	TR-NPL-000320
Moisture Resistance	Method 106E
Thermal Shock	Method 107G
Life Cycle	Method 108A
Salt Spray	Method 101D
Vibration	Method 201A
Part 15, subpart J, FCC Rules	TR-NWT-000063

#### DSX-3 Jacks

##### Electrical

Insertion loss	≤ 0.30 dB at DS3 signal rates for assemblies that do not include a monitor network ≤ 1.00 dB at DS3 signal rates for assemblies that include a single monitor network
Monitor level	21 dB +/- 1.5 dB below signal level
Return loss	≤ -26 dB at DS3, STS-1, and E3 signal rates
Contact Resistance	≤ 0.01 ohms
Characteristic Impedance	75 ohms

##### Mechanical

Insertion Force	10 lb (4.6 kg) maximum
Withdrawal Force	7 lb (3.2 kg) maximum
Life	Minimum 10,000 insertion/withdrawal cycles

##### Environmental

Thermal Limits	-67 to 185°F (-55 to 85°C) operating and non-operating
Thermal Shock	Per MIL-STD-202, method 107D
Humidity	0% to 95% operating and non-operating

Agency Testing	Panel certified to NEBS level 3
----------------	---------------------------------