



## Wide Bank 28 Product Guide

### Wide Bank 28 - DS3

M1-3 multiplexer that delivers asynchronous DS1/E1 service connections from a DS3 signal interface.

### Wide Bank 28 - STS-1

M1-3 multiplexer that delivers DS1/E1 service connections from a SONET, STS-1 signal interface.

### Wide Bank 28 - MSO Feature

Wide Bank 28 (DS3 and/or STS-1) with Maintenance Service Option (MSO), supports the ability to maintain service across four DSX-1/three E1 circuits, as the card electronics are replaced. The MSO Card is an added feature developed to automatically switch T1/E1 service to the spare card when the electronics are manually removed from a system in addition to the automatic back-up provided in standard systems. Service interruption time is less than 200 milliseconds.

Item	Part Number	Description
<b>Configured Systems</b>		
<b>Wide Bank 28 DS3</b>		
Wide Bank 28	930-0070	WB28 case, 1 DS3 controller, 7 WB Quad cards
Wide Bank 28 - DS1 Redundant	930-0071	WB28 case, 1 DS3 controller, 8 WB Quad cards
Wide Bank 28 - DS3 Redundant	930-0072	WB28 case, 2 DS3 controllers, 7 WB Quad cards
Wide Bank 28 - Fully Redundant	930-0073	WB28 case, 2 DS3 controllers, 8 WB Quad cards
Wide Bank 28 - Fully Redundant, with FFO	930-0106	WB28 case, 2 DS3 controllers, 8 WB Quad cards, with FFO
<b>Wide Bank 28 DS3/E1</b>		
Wide Bank 28	930-0330	WB28 case, 1 DS3 controller, 7 WB 3-port E1 cards
Wide Bank 28 - E1 Redundant	930-0331	WB28 case, 1 DS3 controller, 8 WB 3-port E1 cards
Wide Bank 28 - DS3 Redundant	930-0332	WB28 case, 2 DS3 controllers, 7 WB 3-port E1 cards
Wide Bank 28 - Fully Redundant	930-0333	WB28 case, 2 DS3 controllers, 8 WB 3-port E1 cards
Wide Bank 28 - Fully Redundant, with FFO	930-0108	WB28 case, 2 DS3 controllers, 8 WB 3-port E1 cards, with FFO
<b>Wide Bank 28 DS3 Maintenance Service Option (MSO)</b>		
Wide Bank 28	930-0085	WB28 case, 1 DS3 controller, 7 WB Quad cards
Wide Bank 28 MSO - DS1 Redundant	930-0086	WB28 case, 1 DS3 controller, 8 WB Quad cards
Wide Bank 28 MSO - DS3 Redundant	930-0087	WB28 case, 2 DS3 controllers, 7 WB Quad cards
Wide Bank 28 MSO - Fully Redundant	930-0088	WB28 case, 2 DS3 controllers, 8 WB Quad cards
Wide Bank 28 MSO - Fully Redundant, with FFO	930-0107	WB28 case, 2 DS3 controllers, 8 WB Quad cards, with FFO

Item	Part Number	Description
<b>Wide Bank 28 DS3/E1 Maintenance Service Option (MSO)</b>		
Wide Bank 28	930-0334	WB28 case, 1 DS3 controller, 7 WB 3-port E1 MSO cards
Wide Bank 28 MSO - E1 Redundant	930-0335	WB28 case, 1 DS3 controller, 8 WB 3-port E1 MSO cards
Wide Bank 28 MSO - DS3 Redundant	930-0336	WB28 case, 2 DS3 controllers, 7 WB 3-port E1 MSO cards
Wide Bank 28 MSO - Fully Redundant	930-0337	WB28 case, 2 DS3 controllers, 8 WB 3-port E1 MSO cards
Wide Bank 28 MSO - Fully Redundant, with FFO	930-0109	WB28 case, 2 DS3 controllers, 8 WB 3-port E1 MSO cards, with FFO
<b>Wide Bank 28 STS-1</b>		
Wide Bank 28 STS-1	930-0093	WB28 case, 1 STS-1 controller, 7 Quad cards
Wide Bank 28 STS-1 - DS1 Redundant	930-0094	WB28 case, 1 STS-1 controller, 8 Quad cards
Wide Bank 28 STS-1 - DS3 Redundant	930-0095	WB28 case, 2 STS-1 controllers, 7 Quad cards
Wide Bank 28 STS-1 - Fully Redundant	930-0096	WB28 case, 2 STS-1 controllers, 8 Quad cards
Wide Bank 28 STS-1 - Fully Redundant, with FFO	930-0112	WB28 case, 2 STS-1 controllers, 8 Quad cards and Fan Faceplate Option
<b>Wide Bank 28 STS-1 Maintenance Service Option (MSO)</b>		
Wide Bank 28 STS-1 MSO	930-0089	WB28 case, 1 STS-1 controller, 7 Quad cards
Wide Bank 28 STS-1 MSO - DS1 Redundant	930-0090	WB28 case, 1 STS-1 controller, 8 Quad cards
Wide Bank 28 STS-1 MSO - DS3 Redundant	930-0091	WB28 case, 2 STS-1 controllers, 7 Quad cards
Wide Bank 28 STS-1 MSO - Fully Redundant	930-0092	WB28 case, 2 STS-1 controllers, 8 Quad cards
Wide Bank 28 STS-1 MSO - Fully Redundant, with FFO	930-0113	WB28 case, 2 STS-1 controllers, 8 Quad cards and Fan Faceplate Option
<b>Components</b>		
Wide Bank DS3 Case	930-0079	Wide Bank 28 DS3 case and backplane.
Wide Bank 28 STS-1 Case	930-0097	Wide Bank 28 STS-1 case and backplane.
Wide Bank 28 DS3 Controller	740-0029	Wide Bank 28 DS3 controller card.
Wide Bank 28 STS-1 Controller	740-0028	Wide Bank 28 STS-1 controller card.
Wide Bank Quad T1 Card	740-0172	Wide Bank 28 Quad T1 card. Up to eight may be equipped per chassis for a 4:28 redundant DSX-1 configuration.
Wide Bank 28 MSO Quad T1, Electronics & Relay	740-0023	Maintenance Service Option (MSO) Quad T1 Card includes both the Quad T1 Relay Card and the Quad T1 Electronics Card. Up to eight may be equipped per chassis for a 4:28 redundant DSX-1 configuration.
Wide Bank 28 MSO Quad T1 Electronics Card	740-0025	MSO Quad T1 Electronics Card. This is the electronics portion of the MSO Quad T1 Card (Part Number 740-0023). Available for spare purchase only, and requires the MSO Quad T1 Relay Card for operation.
Wide Bank 28 3-port E1 Card	740-0052	Wide Bank 28 3-port E1 card. Up to eight may be equipped per chassis for a 3:21 redundant DSX-1 configuration.

<b>Item</b>	<b>Part Number</b>	<b>Description</b>
Wide Bank 28 MSO 3-port E1, Electronics & Relay	740-0057	Maintenance Service Option (MSO) 3-port E1 Card includes both the 3-port E1 Relay Card and the 3-port E1 Electronics Card. Up to eight may be equipped per chassis for a 3:21 redundant DSX-1 configuration.
Wide Bank 28 MSO E1 Electronics Card	740-0053	MSO E1 Electronics Card. This is the electronics portion of the MSO E1 Card (Part Number 740-0057). Available for spare purchase only, and requires the MSO E1 Relay Card for operation.
Wide Bank 28 OTP Upgrade	750-0009	Software upgrade for controllers containing one-time programmable: for non-NEBS controllers (003-0078) prior to revision 1.40 and NEBS controllers (003-0187) prior to revision 1.10.
Wide Bank 28 MSO and TL1 CD Software	750-0010	FLASH Software for upgrade or field installation, CD version. Contains latest control image and manual on CD for FLASH capable units.

### **Wide Bank 28 Accessories**

Wide Bank 28 Fan Faceplate	790-0003	Fan Faceplate for high-density applications. Allows additional cooling capabilities for up to 40 systems, rack-mounted. Requires revision 2.0 (DS3) and 1.5 (STS-1) or higher controllers.
Shielded DSX-1 Cable 10' - (STS-1 & MSO)	005-0054	64 pin DSX-1 cable, 10 feet, Male/Male, shielded hoods for use with the Wide Bank 28 STS-1 & MSO featured products. (For use with STS PWA # 003-0236 all versions, and MSO electronics PWA # 003-0208 versions lower than 2.00.)
Shielded DSX-1 Cable 25' - (STS-1 & MSO)	005-0055	64 pin DSX-1 cable, 25 feet, Male/Male, shielded hoods for use with Wide Bank 28 STS-1 & MSO featured products. (For use with STS PWA # 003-0236 all versions, and MSO electronics PWA # 003-0208 versions lower than 2.00.)
Wide Bank 28 Accessory Kit	790-0002	Contains power connectors, alarm connectors and ferrite chokes for cables.
Wide Bank 28 Manual - CD ROM	770-0003	CD ROM with Wide Bank 28 DS3 and Wide Bank 28 STS-1 manuals.

### **Universal Accessories**

DSX-1 Cable	005-0025	64 pin DSX-1 cable, 10 feet, Male/Male.
DSX-1 Cable	005-0030	64 pin DSX-1 cable, 25 feet, Male/Male.
Battery Unit	730-0114	Battery unit for combination with battery charger 730-0116.
Power Converter/Battery Charger	730-0116	115VAC to -48VDC power converter and battery charger for combination with battery unit 730-0114.
19" Vertical Mount Crossbar	710-0003	Two (2) heavy duty 19" horizontal crossbars for vertical installation in equipment racks and cabinets.
23" Vertical Mount Crossbar	710-0004	Two (2) heavy duty 23" horizontal crossbars for vertical installation in equipment racks and cabinets.
19" Power Supply Shelf	710-0005	Shelf mounts up to 3 AC power cubes/battery chargers in a 2-Rack Unit (2RU) space.
19"/23" Rack Mounting Brackets	710-0153	Universal 19" or 23" heavy duty rack mounting brackets with mounting screws.