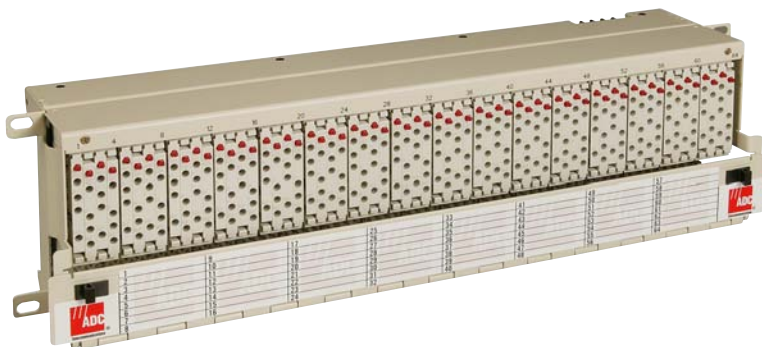


FlexDSX™ Cross-Connect Products

Exclusive CD edition March 2006



Telecommunication networks are not static. In order to support evolving service offerings, they must evolve in size, shape and complexity. Initial network design should consider the need for expansion and growth. Proper design plays a critical role in determining whether a network is an effective revenue generator, or whether it loses profitability through excess labour costs and missed service opportunities.

FlexDSX™ cross-connect products provide the necessary network flexibility. In addition to linking copper-based electrical network elements, FlexDSX products provide access to active digital circuits for nonintrusive monitoring, test access and patching. By creating a lineup of skeleton bays and filling the bays with chassis and modules only as needed, you can defer capital expenses until the equipment is ready to create a revenue stream.

The FlexDSX system presents several key advantages in comparison to standard DDF systems.

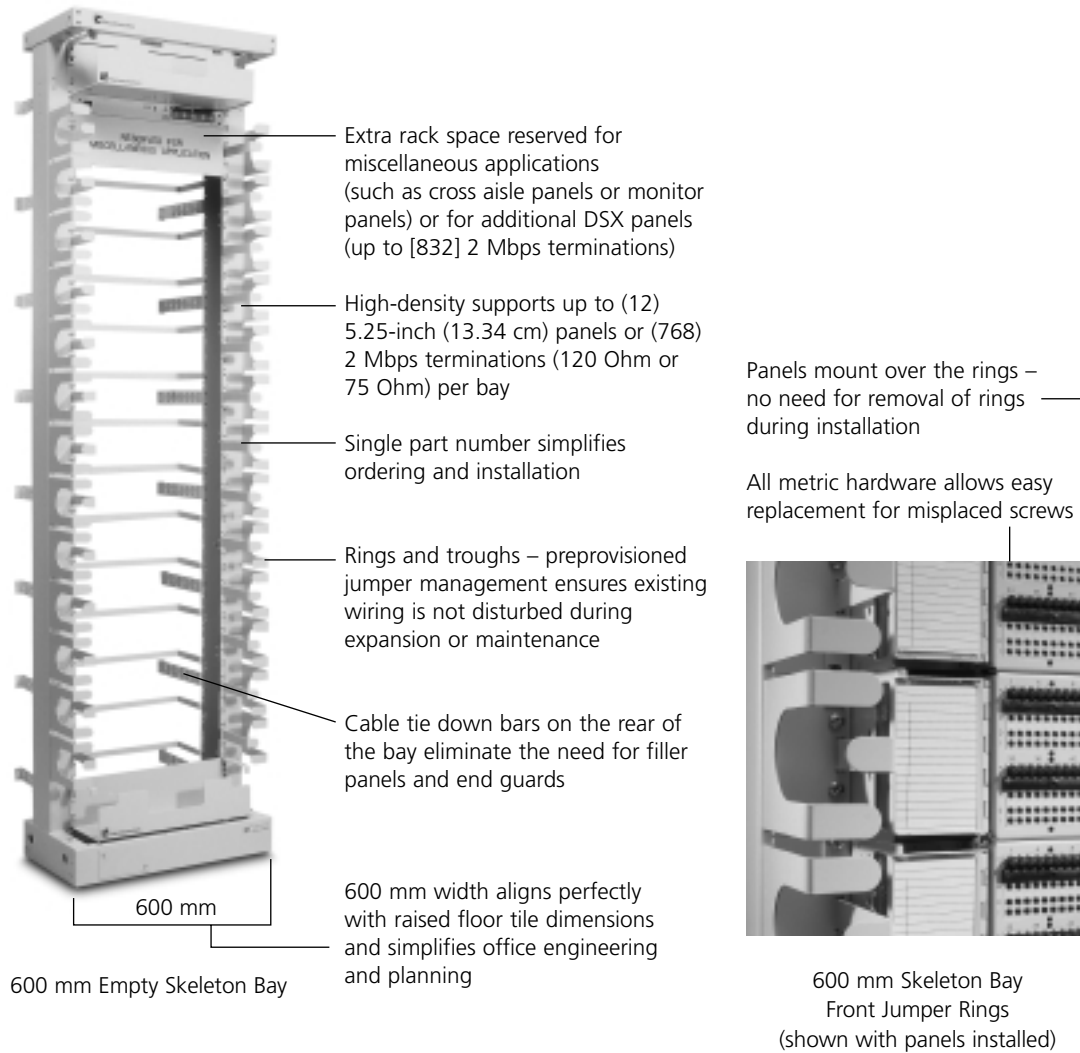
- **Floor space saving:** Higher number of terminations per rack contributes to typical floor space savings of up to 50%
- **Maintenance time savings:** Reduce routine maintenance time and troubleshooting during
 - Circuit identification
 - Circuit testing (both out-of-service and in-service)
 - Circuit monitoring
 - Service restoration
 - Implementing new equipment
 - Relocating service to new equipment
- **Long-term connection reliability:** Prevents network downtime and increases quality and service availability



2 Mbps DSX Front Cross-Connect Solutions

ADC 600 mm Skeleton Bay for FlexDSX™, PxPlus™ and DSX64 Panels

The 600 mm skeleton bay is designed for FlexDSX, PxPlus and DSX 64-termination panels. The fully-assembled bay meets the standard ETSI 600 mm wide x 2.2 meter tall footprint for easy office planning. Rack mounting will also accommodate standard 48.26 cm (19 inch) panels. Fuse panels and all the necessary cable management are factory-installed in the bay, making ordering and installation fast and easy. DSX panels are added in the field as needed. OUT (Tx) and IN (Rx) cable ways for equipment terminations support the use of either 120 Ohm twisted pair or 75 Ohm coaxial cable. The skeleton bay can be mounted on either concrete or raised floor.



Ordering Information

Description	Catalog Number
Skeleton bay front cross-connect	IBF-RSC021

Note: Bays come fully-loaded with cable troughs, cable rings, fuse panel and grounding kits. The bay holds up to nine 7-inch (17.78cm) high modules.

2 Mbps DSX Front Cross-Connect Solutions

FlexDSX™ Introduction

The FlexDSX platform from ADC embodies the ultimate flexibility in circuit access. The 4-port jack card provides dual monitor capability. Dual monitoring allows nonintrusive monitoring in both directions of a 2 Mbps signal from a single DSX location. Monitoring a circuit in both directions from a single DSX location will save time when troubleshooting the network because test gear isn't moved to a second DSX location to test the complete circuit. Dual monitoring also gives access to complete circuits when the other end of the cross-connection is not available, as in the situation where collocation of two carriers exists and the cross-connection between DSX provide the point of interconnection.

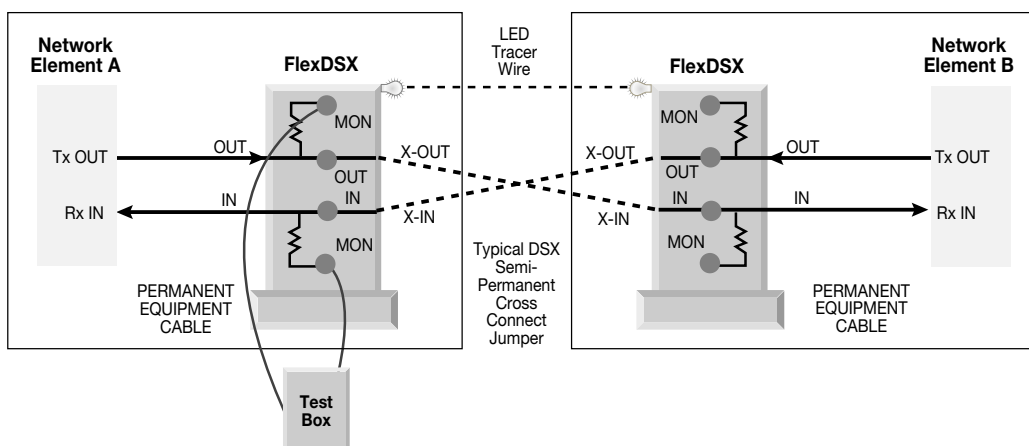
FlexDSX products also provide flexibility in deploying your resources. The completely modular design allows you to deploy modules and chassis on an as-needed basis. By creating a lineup of skeleton bays and filling the bays with chassis and modules only as needed, you can defer capital expenses until the equipment is ready to create a revenue stream.

In today's multinational, multiservice environment, FlexDSX products offer a variety of standard terminations. From wire-wrap to coax to RJ45 connectors, FlexDSX products offer the option to terminate 2 Mbps equipment from a single location.

Features

- Conduct protocol testing for both OUT and IN transmission directions from one location – saves time when testing a circuit
- Staggered jack alignment – allows industry standard patch cords to be used side-by-side in high density products
- Jumper rings and rear cable bars are installed on the skeleton bay – provides superior cable management
- OUT/IN equipment cable terminations on the backplane are modular in groups of four – allows for multiple circuit count configurations (56, 64, 84)
- Works with twisted pair or coax cabling; choose wire-wrap, BNC or 1.6/5.6 interfaces – flexibility to meet a variety of needs
- Coax and 120 Ohm connections provide the flexibility to connect 75 Ohm equipment to 120 Ohm equipment

FlexDSX™ Application

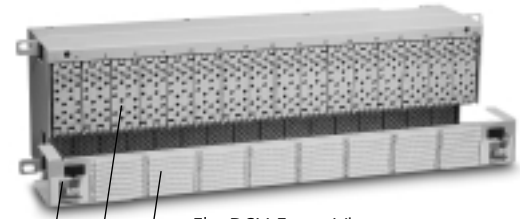


FlexDSX products provide the convenience and time-saving feature of testing and monitoring the signal in both directions from one location.

2 Mbps DSX Front Cross-Connect Solutions

FlexDSX™ Panels – Four-Port (Dual Monitor) Jack Access

FlexDSX panels are the only DSX panels in the industry that offer individual, removable jacks, removable OUT/IN equipment cable terminations, and four-port (bidirectional) test access capabilities. The four-port jack system consists of OUT and IN jacks for direct access to the network element's input and output signals, and DUAL MONITOR jacks for monitoring of the signal in both directions simultaneously at a single location. Dual monitors are especially beneficial for testing when the other side of the cross-connect is located far away, in another room, or is inaccessible (i.e., collocation).



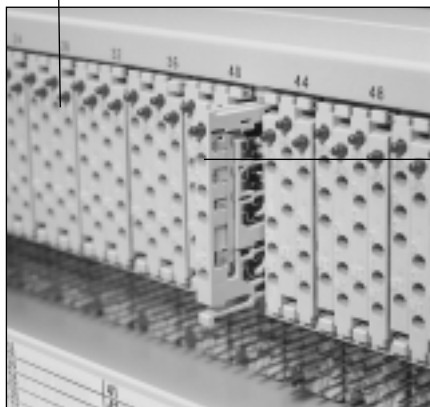
FlexDSX Front View

Large labels provide clear documentation of circuits

64-terminations per panel (Balun and twisted pair) – matches 2.048 Mbps equipment cabling breakouts

Large front trough avoids cable build-up

Staggered jacks allow industry standard patch cords to be used side-by-side



FlexDSX panel with individual jack card pulled out

Individual removable jacks



FlexDSX Rear View
(1.6/5.6 Balun version shown)

Chassis are configured with OUT/IN interfaces in groups of four for easy removal and minimal disturbance of adjacent circuits



FlexDSX four-port jack card

Tracer LED eliminates manual tracing of circuits for faster circuit identification

Four-port (dual monitor) jacks allow quick isolation of problems in larger applications where the cross-connect may be located far away or is inaccessible

2 Mbps DSX Front Cross-Connect Solutions

FlexDSX™ Panels – Four-Port (Dual Monitor) Jack Access

Ordering Information

Description	Catalogue Number
Fully-loaded chassis (front / rear access)	
5.25" (13.34 cm) high, 19" (48.26 cm), EIA/IEC mounting	
120 Ohm wire-wrap equipment interface	DFX-100001
BNC Balun equipment interface	DFX-210001
1.6/5.6 Balun equipment interface	DFX-220001
SMB	DFX-230001
Type 43	DFX-240001
1.0/2.3	DFX-250001
RJ45	DFX-400001
Shielded RJ45	DFX-500001
LSA-PLUS®	DFX-800008
Fully-loaded chassis (all-front-access), 120 Ohm	
Wire-wrap	DFX-1F0001
LSA-PLUS®	DFX-8F0008

Module and Card

4-Port Jack Card with 4-Pack Module



4-Pack Module
with 1.6/5.6 connectors



4-Pack Module
with wire-wrap connectors



4-Pack Module
with BNC connectors



4-Pack Module
with LSA-PLUS contacts

Ordering Information

Description	Catalog Number
FlexDSX 64-position empty chassis 19" (482.6mm) x 5.25" (133.35mm) (3RU)	DFX-9E0002
4-pack modules	
Wire-wrap, front cross-connect, 120 Ohm	DFX-9E1000
BNC, front cross-connect, 75 Ohm	DFX-9E2000
1.6/5.6, front cross-connect, 75 Ohm	DFX-9E3000
RJ45, front cross-connect, 120 Ohm	DFX-9E4000
Shielded RJ45, front cross-connect, 120 Ohm	DFX-9E4000-S
SMB, front cross-connect, 75 Ohm	DFX-9E5000
Circuit cards	
FlexDSX jack, odd	DFX-1
FlexDSX jack, even	DFX-2

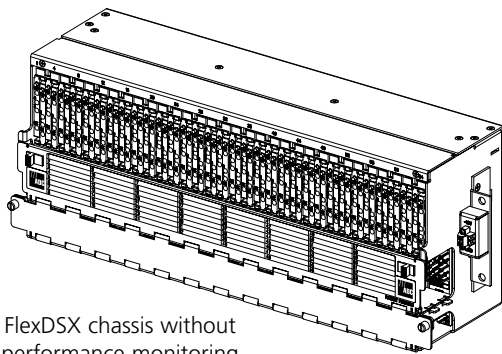


4-Port Jack Card

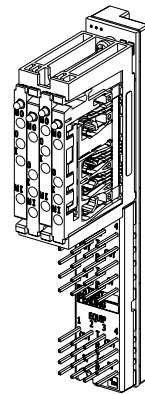
2 Mbps Digital Cross-Connect System

All-Front-Access FlexDSX™ Panels

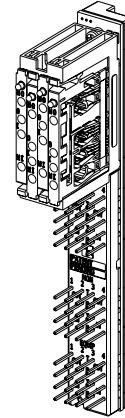
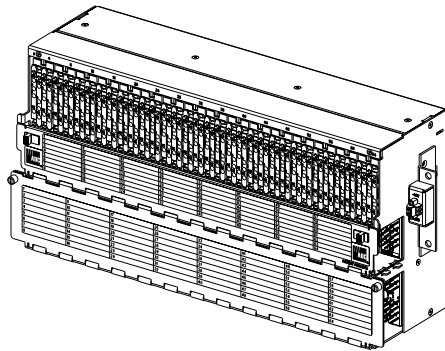
The all-front-access FlexDSX product family, designed for 2.048 Mbps cross-connect applications for the standard 600 mm footprint, provides 0.045" (1.14 mm) square wire-wrap pin interface options on both the cross-connect and equipment fields and is available with or without performance monitoring. Each chassis holds up to 16 four-circuit front access module packs. No internal wiring is required between modules and the chassis or between adjacent modules. Each of the 64 individual jack cards in a fully-populated chassis have four bantam-sized ports—monitor OUT, OUT, IN, and monitor IN, as well as a red flashing tracer lamp. Monitor network resistors provide 120 Ohm impedance.



FlexDSX chassis without performance monitoring



Four-Pack Modules



Four-Pack Modules

Ordering Information

Description	Catalog Number
All-front-access FlexDSX panels	
Empty rack (holds 10 DFX-1F0001 chassis)	DFX-RSFA04
Fully-loaded panel	DFX-1F0001
Empty chassis	DFX-9E0003
Four pack module	DFX-9F1000
All-front-access FlexDSX with performance monitoring	
Empty rack (holds 8 DFX-1F0001-DPM chassis)	DFX-RSFA03
Fully-loaded panel	DFX-1F0001-DPM
Empty chassis	DFX-9E0003-DPM
Four pack module	DFX-9F1000-DPM

2 Mbps Digital Cross-Connect System

Bay Hardware and Accessories

End Guard

These 2.2 m high end guards provide protection and a finished appearance at the start and end of the lineup.

Ordering Information	
Description	Catalog Number
450 mm deep end guard	RAC-EGK450*
600 mm deep end guard	RAC-EGK600*
300 mm deep end guard	RAC-EGK300*

* Each kit comes with two end guards

DSX Frame Doors

The door kit provides left and right doors for the front and rear of the DSX frame. Also included are top, front, and rear brackets for mounting of the doors to the frame.

Ordering Information	
Description	Catalog Number
DSX frame door kit	IBF-1ENCDOR

End Guard for Use with Door Enclosure Kit

This end guard kit is used in conjunction with the DSX frame doors used to enclose the frame. It also provides protection and a finished appearance to the start and end of the frame lineup.

Ordering Information	
Description	Catalog Number
End guard for use with DSX frame door kit	IBF-1ENCEG

Filler Panel Kits

The filler panel kits add spacing between DSX frames. The kits come in 150 mm and 300 mm measurements.

Ordering Information	
Description	Catalog Number
150 mm filler panel kit	SFK-122150
300 mm filler panel kit that includes upper and lower cable trough	SFK-122300

2 Mbps Digital Cross-Connect System

Bay Hardware and Accessories

Rack Installation Kit

This rack installation kit comes with all the necessary hardware to install the DSX rack in a raised floor environment.

Ordering Information

Description	Catalog Number
Zone 2 raised floor mounting kit	RAC-MX0615
Concrete floor kit	RAC-MX0616

Note: See installation guidelines for instructions on mounting the DSX Frame.

AC Outlet Kit

This AC outlet kit is a universal continental Europe outlet that mounts in the base of the frame.

Ordering Information

Description	Catalog Number
UK AC outlet kit	AUX-AC0003
Continental Europe AC outlet kit	AUX-AC0004
North American AC outlet kit	AUX-AC0005

Cross Aisle Panels

Ordering Information

Description	Catalog Number
128-circuit cross aisle panel	AUX-200022
64-circuit cross aisle panel with trace LEDs	AUX-200064

Alarm Panels

Ordering Information

Description	Catalog Number
64-circuit all front access panel	AUX-000040

Bantam Patch Cords

Ordering Information	
Description	Catalog Number
Three conductor*	
Single	
1' (.3 m)	PJ712
1.5' (.46 m)	PJ713
2' (.61 m)	PJ714
2.5' (.76 m)	PJ715
3' (.91 m)	PJ716
4' (1.22 m)	PJ718
5' (1.52 m)	PJ720
6' (1.83 m)	PJ722
8' (2.44 m)	PJ1208
10' (3.05 m)	PJ1210
12' (3.66 m)	PJ1212
15' (4.57 m)	PJ1415
20' (6.1 m)	PJ1420
25' (7.62 m)	PJ1425
30' (9.15 m)	PJ1430
50' (15.24 m)	PJ1450
Dual*	
1' (.3 m)	PJ762
2' (.61 m)	PJ764
2.5' (.76 m)	PJ765
3' (.91 m)	PJ766
4' (1.22 m)	PJ768
5' (1.52 m)	PJ770
6' (1.83 m)	PJ772
8' (2.44 m)	PJ1308
10' (3.05 m)	PJ1310
12' (2.66 m)	PJ1312
14' (4.27 m)	PJ1514
20' (6.1 m)	PJ1520
25' (7.62 m)	PJ1525
30' (9.15 m)	PJ1530
35' (10.68 m)	PJ1535
45' (13.73 m)	PJ1545
Patch cord kit	
International patch cords kit	ACK-INTL
International patch cords kit, nickel-plated	ACK-INTL-N



PJ768
Three-Conductor Dual Patch Cord



PJ718
Three-Conductor Single Patch Cord

* For nickel plated patch cords, add the suffix "N". For plenum-rated fire retardant patch cords, add the suffix "PL".



2 Mbps Super High Density Solutions Accessories

Tools and Tool Kits

Ordering Information

Description	Catalog Number
Manual wire-wrap kit includes: Manual wire-wrap kit 22-24 AWG wire-wrap bit sleeve 24-26 AWG wire-wrap bit sleeve 22-24 AWG wire-wrap bit 26 AWG wire-wrap bit	AUX-0X0165
Manual wire-cutting/stripping tool	AUX-0X0803
Manual unwrapping tool (screw driver tool)	AUX-0X0802
Manual unwrapping tool (soft, ergonomic handle)	AUX-0X0381
Unwrapping sleeve for use with AUX-0X0381	AUX-0X0383
Electric 220 wire-wrap gun	AUX-0X0466
22-24 AWG bit (0.64 - 0.51mm)	AUX-0X0467
22-24 AWG sleeve (0.64 - 0.51mm)	AUX-0X0468

Cross-Connect Wire

Ordering Information

Description	Catalog Number
Cross-connect wire, 500-foot roll (150 m)	DSX-CCW/500
Cross-connect wire, 1000-foot roll (300 m)	DSX-CCW/1000
Cross-connect wire, 1500-foot roll (450 m)	DSX-CCW/1500
Cross-connect wire, 2000-foot roll (600 m)	DSX-CCW/2000



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