



Alcatel-Lucent 1665

Data Multiplexer Extend (DMXtend) | Release 1.0 - 10.0

Engineering and Ordering Information

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About This Document

About This Document

The Metropolis® DMXtend Access Multiplexer is now the Alcatel-Lucent 1665 Data Multiplexer Extend. A transition period updated the name and company logo on the components of this product.

DMXtend abbreviates Alcatel-Lucent 1665 Data Multiplexer Extend in this document.

Since DMXtend was aligned with the Alcatel-Lucent 1665 Data Multiplexer Release 8.0, DMXtend Release 6.0 and 7.0 were skipped.

ED8C951-10 describes DMXtend orderable items to support the DMXtend Applications and Planning Guide (APG). The APG describes all DMXtend architecture, technical specifications and customer service details. See also ED8C951-20 for DMXtend cabling signal and color code connections and the DMXtend Installation Manual for complete details.

Ordering Documents

Check latest issues and order Alcatel-Lucent documents at Online Customer Support (OLCS):
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About This Document

Issue Notes

Issue 29, October 2013

Added R10.0 hardware, software, documentation. Removed discontinued codes.

Issue 28, August 2012

Removed discontinued codes.

Issue 27, July 26, 2010

Added R9.0 hardware, software, documentation. Removed discontinued codes.

Issue 26, February 26, 2010

Added R8.0.4 software, documentation and kits. Changed 735C back to 735A.

Removed discontinued fibers from Table D.

Updated - Note 9, LNW91 test pack kits, power cable descriptions, discontinuing codes.

Issue 25, September 18, 2009

Added R8.0.2, R8.0.3 software, documentation and kits. Added

RJ45/ground note to Ethernet backplane cables. Updated Note

9 with resource for optical fibers, attenuators etc. Discontinued various Table C fiber codes.

Verified latest stocked codes.

Issue 24, April, 2009

Updated codes' discontinue (DA) status. Updated codes' stock status (Eng. Note 13).

Removed baffle reference from Eng. Note 3 since it is not a requirement.

Issue 23, February, 2009

Added R8.0.1 software and documentation and LNW2/R8.0.1 kit.

Added customer specific 849105671 sync kit.

Removed customer specific filtered sync cables and TDI power unit.

Issue 22, November, 2008

Added R8.0 hardware, software, documentation.

Added Table C1 customer specific fibers, CDWM plugins, more R3.1.7 / 5.1.2 software.

Updated Eng. Note 9 (fibers) and 12 (power drain) and Floor Plan drains.

Updated plugin descriptions and where used.

Discontinued R4.0, 5.0, 5.1 software kits, R3.1.4-6, 5.0.3 limited availability.

Updated OC48 DWDM plugin descriptions and where used.

Issue 21, June, 2008

Added R5.1.2 software / documentation, 109678847 R5.1.1 CIT software, 849093703 R5.1.1 LNW2.

Replaced 109658690 with 109678847 R5.1.1 CIT SW.

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Engineering Notes

1. This document contains engineering and ordering information. See the Applications and Planning Guide for complete circuit pack detail and integration information. See the Installation Manual for complete installation instructions.
2. See Table A for ordering information for types of shelves, circuit packs and accessories. A System Controller circuit pack is required for software (Table E) and provisioning. Spare pack recommendation is a minimum of one spare per code. For additional recommendations, see the Applications and Planning Guide.
3. DMXtend mounts horizontally in a 19" or 23" bay. For example, in a seven foot bay, up to eight DMXtend can be stacked since DMXtend is side vented. The shelf ships with an integral fan unit, air filter, and mounting brackets for a 23" bay. 19" mounting brackets are an accessory option ordered separately. For mounting in 19" or 23" bays, the minimum aisle space in the front and rear of the bay is 762mm [30"]. The maximum shelf weight with circuit packs is 13.65kg [30lb]. Network Bay Frames will require 2" kick plate extensions for depth. See Figure 1 etc. for dimensions. DMXtend is grounded by the thread forming mounting screws included with the shelf. DMXtend is NEBS Level III compliant. See Table B for cable assemblies.
4. Blanks must be installed in all empty slots for proper air flow and cooling through the shelf.
5. The integral fan unit and air filter are orderable as spare or replacement items.
6. (discontinued)
7. The mounting brackets are adjustable to 152mm [6"] or 203mm [8"] from the shelf front. See the DMXtend Installation Manual to change the depth of these brackets.
8. 19" mounting brackets must be ordered separately for the 19" bay application.

9. DMXtend requires the 42-degree angled rotating boot LC. One code provides one fiber.
Table C halogen free fibers have a 1.6mm outer diameter.
Only the "Angled LC to Straight SC Single Mode Fiber" codes are stocked.
See Note 13 for stock lead time details.
Some Single mode LC Line Build Outs (LBO) are:
5dB 108279381, 10dB 108279431, 15dB 108279480, 20dB 108279530
Table C1 are Customer Specific fibers.
Additional LBO's and fibers can be found at www.ofsoptics.com
or see also Alcatel-Lucent Fiber Ordering Guides 065-250-104, 065-250-105, 065-250-400, and ED8C900-16.
10. For single mode test, two 2ft angled LC to angled LC single mode fibers are needed to loop back the main slots; a third fiber is required if optics are in any of slots D1/2 or G1/2.
Only one 15dB LC type attenuator is required for looping only slots D1/2 or G1/2.
11. (discontinued)
12. The shelf requires a -48VDC Power Feed A and B. The shelf is designed to work from -40.0 to -57.0 VDC. Each feed has a 10 amp circuit breaker. Therefore, the worst case List 2 current drain, one feed at -40V, is considered 9.5 amps due to the 10 amp breaker size.
Therefore, $9.5 \text{ amps} \times 40 \text{ volts} = 380 \text{ watts}$ maximum power
List 1 current drain, one feed at -48V, $= 380 \text{ watts} / 48 \text{ volts} = 7.9 \text{ amps}$
- Power Feed A/B Warnings (for a 10 amp shelf equipped with the fan and LNW2):**
If two LNW141 and four LNW170 lose one feed, the second feed drain immediately exceeds its 10 amp breaker and the shelf loses all power.
If two LNW84 and four LNW20 lose one feed, the second feed drain immediately exceeds its 10 amp breaker and the shelf loses all power.
If two LNW141 and two LNW170 lose one feed and the second degrades to -40VDC, the drain exceeds the 10 amp breaker and the shelf loses all power.
If two LNW141 and four LNW20 lose one feed and the second degrades to -40VDC, the shelf similarly loses all power.
If two LNW141, two LNW20, and two LNW55 lose one feed and the second degrades to -40VDC, the shelf similarly loses all power.
- Example Power Configuration: 19.1 watts (one shelf and fan unit)
21.0 watts (one LNW2 controller)
60.2 watts (two LNW38 OC-12 mains)
37.9 watts (two LNW39 DS1/DS3, $20.6 + 17.3$)
43.2 watts (one LNW74)
Total Example Power: 181.4 watts
List 1 Current Drain, i.e. at -48V $= 181.4 \text{ watts} / 48 \text{ volts} = 3.78 \text{ amps}$
List 2 Current Drain, i.e. at -40V $= 181.4 \text{ watts} / 40 \text{ volts} = 4.54 \text{ amps}$
13. Fiber assemblies, cable assemblies or kits referring to this note are stocked items and are available to ship in 5 working days or less after receipt of order. All others are available to ship in 20 working days or less after receipt of order.

14. Each initial or upgrade software kit contains one release specific Software CD, Customer Release Notes CD. Upgrade kits include any intermediate upgrade software and CRNs required for the upgrade path. Before ordering software, determine software and hardware compatibility. Identify the software in service before ordering a software upgrade.
15. APG 109454017 covers all features earlier than R5.1. The R10.0 APG 365-372-324R10.0 covers all current features minus any discontinued features of earlier releases.

Features

Table A - DMXtend Shelf and Accessories				
Description	Initial Release	Orderable Code	Apparatus Code	CLEI Code
DMXtend Shelf The shelf has individual removable center dividers to allow the LNW140, LNW141, LNW84 (full shelf width packs) into one Main and one A/B slot simultaneously. It also has power filters for CE testing.	4.0.1	849031372	-	SOM3A00A
DMXtend 849031372 with 849001367 Rear Cover Kit	4.0.1	849031364	-	SOM3A00A
DMXtend 849031372 w/ 849031471 Reverse Air Flow Fan (DA 12/31/13)	4.0.1	849031356	-	SOM3A00A
Accessories:				
Baffle, 17.5" wide with adjusting side brackets for 19" or 23" bays, height = 3" depth= 12.5"	1.0	848862181	-	-
Fan Unit, integral to 849031372	1.0	848859153	-	SOCPS00F
Fan Filter for 848859153 Fan only	1.0	408691111	-	
Fan, Reverse Air Flow for Closed Cabinet (w/o air filter)	4.0.1	849031471	-	SOUCAD3D
19" Bay Mount Brackets, includes one 848861332 kit plus one bracket w/ hardware	4.0.1	849011804	-	-
Fiber Duct Assembly Kit, includes all required hardware, requires 1 inch square space immediately below front view of DMXtend. Use only when dressing fibers to the right.	2.0	848949145	-	-
Two Fiber Spools / One Bracket Kit, mounts to the left side of the DMXtend shelf, mounting screws included, for dressing fibers left	2.0	848949152	-	-
One (spare) ESD Jack (one included on DMXtend)	2.0	845264118	-	-
24 Fiber Bracket for pre-fiber slots, attaches to a blank	9.0	849127907	-	-
LNW91 Test Circuit Pack Kit, includes SPG800, cables, manual (DA 12/31/14) LNW91 Test Circuit Pack only (DA 12/31/14)	3.1	109567115 849006119	LNW91	-
19" / 23" Rear Cover Kit, mounts on the back of a cabinet bay	3.1	849001060	-	-
DMXtend Center Top and Bottom Divider Kit	5.0	849054135	-	-
Spare Original Flush Front Cover for 848846606 shelf	5.0.2	848945002	-	-
Spare Deep Cover Retrofit Kit for 848846606 shelf required for LNW55, 84, 785, 905 and all WDM packs	5.0.2	849064282	-	-
Spare Standoffs (qty=4) used with DMXtend Rear Cover	5.1	849080155	-	-
Customer Specific Kits:				
849031372 Shelf, LNW2, 2 OC48 LNW41, 2 OC48LR1, 2 LNW39, LNW74	5.0.1	849063946	-	-
Cables = 12Ft 10Ga Power, 150Ft Misc.Disc., 150Ft X.25-X.25, 150Ft Office Alarm, CIT, 150Ft Sync Harness	2.0	848955183	-	Eng.Note 13
DMXtend 849031372 Shelf w/ 849031471 Reverse Air Flow Fan (DA 12/31/13)	4.0.1	849031356	-	SOM3A00A

Features

Table A - DMXtend Shelf and Accessories				
Description	Initial Release	Orderable Code	Apparatus Code	CLEI Code
849031372 Shelf, LNW2, LNW41 OC48 w/ LR1 plugin, LNW39	5.1	849091749		
849031372 Shelf, LNW2, LNW38 OC12 w/ IR plugin, LNW39		849091764		
849031372 Shelf, LNW2, LNW51 OC12 w/ LR plugin, LNW39		849091731		
849031372 Shelf, LNW2, LNW41 OC48 w/ LR2 plugin, LNW39		849091756		
849031372 Shelf, LNW2, two LNW41, two OC48LR1, two LNW39, four 177D Blanks	8.0	849098058		
similar to 849098058 kit except two OC48LR2 vs. OC48LR1		849098066		
849031372 Shelf, LNW2, two OC12 IR LNW38, two LNW39, four 177D Blanks		849098074		
849031372 Shelf, LNW2, two OC12 IR LNW38, one LNW74, three 177D Blanks		849098082		
similar to 849098082 except two LNW41, two OC48LR2 vs. LNW38		849101027		
similar to 849101027 except two OC48LR1 vs. OC48LR2		849101035		
849031372 Shelf, LNW2, two LNW41, two OC48LR2, one LNW74, two LNW39, three 177D Blanks		849101043		
similar to 849101043 kit except two OC48LR1 vs. OC48LR2		849101050		
one 9 pin filtered sync connector, cover, standoffs and screws		849105671		
System Controller for CTL Slot, see Fig. 2:				
Pre-R4.0 LNW1, OSP (Outside Plant temperature range), (re-use)	5.0	109584912	LNW1	SOC3PTGE
LNW2 w/ two 109569038 blank memory cards, OSP (no X.25)	4.0	108994989	LNW2	SOCUH0MB
Spare (blank) 256Mb Memory Card for LNW2	4.0.1	109569038		SOUCACRD
Customer Specific LNW2 Kits w/ software pre-loaded include:				
one LNW2, two R5.1.1 memory cards, software CD, (DA 12/31/13)	5.1.1	849093703		
similar except one DMX R8.0.3 card, one DMXtend R8.0.3 card (DA 6/30/14)	8.0.3	849120258		
similar except DMXtend R8.0.5 cards	8.0.5	849136510		
similar except DMXtend R8.0.6 cards	8.0.6	849155783		
similar except DMXtend R9.0.1 cards	9.0.1	849153663		
similar except one DMX R9.0.1, one DMXtend R9.0.1	9.0.1	849157847		
similar except one DMX R9.0.3, one DMXtend R9.0.1	9.0.3	849178959		
similar except DMXtend R10.0.2 cards	10.0.2	849186655		

Table A - DMXtend Shelf and Accessories				
Description	Initial Release	Orderable Code	Apparatus Code	CLEI Code
Main / High Speed Packs for Slots M1, M2, see Figure 2:				
Blank, See Note 4	1.0	109231944	LNW42	SOPQAC2D
Blank, Detectable, See Note 4	1.1	109417931	LNW95	SOPQAEAD
OC3 Intermediate 1310nm Port 1, 6 STS-1s, OSP (DA 6/30/14)	1.0	109197111	LNW40	SOI6EZ0C
OC3 Long 1310nm Port 1, 6 STS-1s, OSP (DA 6/30/14)	4.0	109589242	LNW601	SOUIAP5F
OC3 Plugin Port 1, see Table A Plugins	9.0	109706416	LNW302	SOUIBFNF
OC12 Intermediate 1310nm Port 1, 12 STS-1s, OSP (DA 12/31/14)	1.0	109196352	LNW38	SOI6BZ0C
OC12 Long 1310nm Port 1, 12 STS-1s, OSP (DA 12/31/14)	1.1	109423269	LNW51	SOI9T30C
OC12 Plugin Port 1, see Table A Plugins	9.0	109706408	LNW382	SOUIBFMF
OC48 1310nm Long Port 1, 12STS1 OSP enables in-service upgrade from OC12 to OC48 UPSR	4.0	109492488	LNW52	SOI3994DA
OC48 Small Form Plugin (SFP) Port 1, 48STS1 OSP, encrypted:				
OC48 SFP 2km XT 1310nm SM LC	3.1	109197129	LNW41	SO2IKT0A
similar except 40km 1310nm	5.0	109564518	OC48SR1	SOUIAJZF
similar except 80km 1550nm	3.1	109493528	OC48LR1	SOOTABRD
for R8.0, see Plugins section, use also OC48 DWDMs	3.1	109504431	OC48LR2	SOOTACED
Main-TDM Full Width Packs for Slots M1-A1/B1, M2-A2/B2, remove the center divider, see 849031372 and Figure 2:				
OC3/12 Plugin Port 1-8 or OC48 Plugin Port 1 & 5, VLF deep cover DS1 Port 1-16, DS3 Port 1-3, 5G VLF, OSP	8.0	109643940	LNW84	SOUIAW4F
OC192 Very Large Fabric (VLF) Plugin Port 1 This pack allows varying packs in Function / Growth Slots 1 vs. 2 See the PIPG for allowed combinations. Use below plugins. For DS1, only the LNW8 is VLF compatible. LNW6, LNW7, LNW39, LNW111, LNW112 are not VLF compatible. LNW55, LNW62, LNW64 require VLF Main packs.	5.0	109567149	LNW141	SOUIARFF
TDM / Low Speeds for Slots A1/B1, A2/B2 Figure 2, i.e, no VLF:				
Blank, See Note 4	1.0	109231951	LNW43	SOPQAC3D
Blank, Detectable, See Note 4	1.1	109417949	LNW96	SOPQEABD
DS1 Port 1-16 DS3 Port 1-3, use hybrid cables, not VLF compatible similar to LNW39 plus performance monitoring	1.0 8.0	109196360 109664508	LNW39 LNW391	SOI6T10C SOUIA24F
DS1 Port 1-16, uses Hybrid cables, not compatible with VLF Mains	2.0	109310821	LNW112	SOI8ACAB
DS3 Port 1-3, uses Hybrid cables, not compatible with VLF Mains	2.0	109310839	LNW111	SOI8BBAB

Features

Table A - DMXtend Shelf and Accessories				
Description	Initial Release	Orderable Code	Apparatus Code	CLEI Code
TDM / Low Speeds for Slots D1, D2, G1, G2, see Figure 2:				
177D Blank, See Note 4	1.0	108950585	177D	SOPQAAHD
177D kit w/ 849127907 (24 Fiber Bracket) for pre-fiberizing the slot	9.0	849130885	-	SOPQAJ8D
LNW98 Blank, Detectable, See Note 4	1.1	109412866	LNW98	SOPQAD9D
LNW98 kit w/ 849127907 (24 Fiber Bracket) for pre-fiberizing the slot (DA 3/31/14)	9.0	849130893	-	SOPQAJ9D
DS1 Ports 1-28, Performance Monitoring, OSP LNW6 (discontinued) and LNW7 are not compatible with VLF Mains	1.0	108764036	LNW7	SOIFLS0C
DS1 Ports 1-56, OSP, R3.0 E1 Ports 1-56 (DA 6/30/14) similar plus performance monitoring	1.1 8.0	109164889 109664490	LNW8 LNW801	SOCMB0NJ SOOMACRE
DS3/EC1 Ports 1-12, OSP	1.0	108694845	LNW16	SOIFJM0C
DS3/EC1 Ports 1-48, OSP, w/ loopbacks	3.0	109492470	LNW19B	SOI6120C
DS3/EC1/Transmux Ports 1-48, OSP	5.0.1	109535070	LNW20	SOOMABDE
Transmux Ports 1-12, OSP, uses DS3 12 Conductor Cables (DA 12/31/14)	1.1	109164905	LNW18	SOCMBOPJ
OC3 Plugin Port 1-4, OSP, 12 STS-1, facility loopbacks	2.0	109068783	LNW37	SOI9L5TC
OC3 Plugin Port 1-8, 48 STS-1, facility loopbacks	3.0	109411082	LNW45	SOI9LPUC
OC3/12 Plugin Port 1-12 or OC48 Port 1, 4, 7 or 10, OSP requires VLF Main packs and the deep cover	5.1	109532283	LNW55	SOUIAV1F
OC12 Plugin Port 1-4, 48 STS-1 OSP	3.0	109319582	LNW49	SOI9T4UC
OC48 Intermediate Port 1, 12 STS-1	3.0	109008987	LNW31	SOI5KL5D
OC48 Plugin Port 1-4, OSP, requires VLF Main packs	5.0	109532291	LNW62	SOUIAB5F
OC48 / OC48-DWDM Plugin Port 1, 12STS1 OSP see Table A - Plugins, use either OC48 or OC48-DWDM plugins	8.0	109678870	LNW402	SOUIA6KF
OC192 DWDM Ports1-8 (Ch52-59) (195.2-195.9THz), one Mux/ Dmux Port and one WDM (OTS) I/O Port, deep cover	5.1.1	109616565	LNW785	WMOMA3MJ
OC192 10G Mux/Demux Port with 1GE/FC/2XFC/FICON/OC3-12 Plugin Ports 1-8 or OC48 Plugin Ports 1,3,5,7, requires deep front cover. Use all speed related Plugins.	9.0	109614834	LNW705	SOOMAB3E
100MbE Fiber Plugin Port 1-8 and 100MbE Electrical Backplane Port1-16 enhanced private line, Slots D1, G1 only if no VLF, Slot 2 requires blank	3.0	109492504	LNW74	SO2ILU0A
GbE 1000Base-X Fiber / 100M/GbE Electrical Plugin Port 1-4 and 100MbE Fiber Plugin Port 5-8 QOS, Link Aggregation, Slot D1, G1 only / no VLF, Slot 2 blank	5.1	109642728	LNW170	SOUIAWHF
SAN FC / FICON / ESCON 1G Fiber Plugin Port 1-4 Slots D1, G1 only if no VLF, Slot 2 requires a blank (DA 12/31/14)	3.1	109461491	LNW73	SOI9Z9ZC

Features

Table A - DMXtend Shelf and Accessories

Description	Initial Release	Orderable Code	Apparatus Code	CLEI Code
GbE 1000Base-SX/LX Private Line Fiber Plugin Port 1-4, OSP, no switch, Slots D1, G1 only if no VLF, Slot 2 requires a blank	4.0	109535088	LNW63	SOUIAB6F
GbE 1000Base-X Fiber/Electrical Plugin Port 1-8, private line, OSP, requires VLF Main packs	5.0	109599696	LNW64	SOOTAFWD
GbE/100MbE Fiber/Electrical Plugin Port 1-4 Private Line, VLF, OSP, see Table A - Plugins	9.0	109709188	LNW87	SOUIBFPF
Plugins - SFP, XFP, PTM: for respective pack types / speeds unless stated				
OC3 2km 1310nm XT SM LC Universal for LNW37, LNW45, LNW55, LNW84, LNW705	4.0.1	109602599	S15512	WOTRAAXC
similar except 15km	2.0	109453894	OC3IR1I1	SOOJBDEC
similar except 40km	2.0	109453886	OC3LR1I1	SOOJBCDC
OC12 15km 1310nm XT SM LC for LNW49, LNW55, LNW84, LNW705	3.0	109453902	OC12IR1I1	SOOJCCEC
similar except 40km 1310nm	3.0	109467522	OC12LR1	SOOJCDCD
similar except 80km 1550nm	4.0.1	109604447	OC12LR2	SOOTAFXD
OC3/12 622Mb/s Coarse WDM-LR (CWDM-LR) SM for LNW37, LNW45, LNW49, LNW55, LNW84, LNW705:	8.0			
Ch47 1471nm (DA 3/31/14)		109664086	S622C47EL	SOUIA3FF
Ch49 1491nm (DA 3/31/14)		109664094	S622C49EL	SOUIA3GF
Ch51 1511nm (DA 3/31/14)		109664102	S622C51EL	SOUIA3HF
Ch53 1531nm (DA 6/30/14)		109664110	S622C53EL	SOUIA3JF
Ch55 1551nm (DA 3/31/14)		109664128	S622C55EL	SOUIA3KF
Ch57 1571nm (DA 6/30/14)		109664136	S622C57EL	SOUIA3LF
Ch59 1591nm (DA 6/30/14)		109664144	S622C59EL	SOUIA3MF
Ch61 1611nm (DA 6/30/14)		109664151	S622C61EL	SOUIA3NF
OC48 2km 1310nm XT (industrial) SM LC for LNW41, LNW55, LNW62, LNW402, LNW84, LNW705	5.0.1	109564518	OC48SR1	SOUIAJZF
similar except 40 km 1310nm	3.1	109493528	OC48LR1	SOOTABRD
similar except 80km 1550nm	3.1	109504431	OC48LR2	SOOTACED
OC3/12/48 15km 1310nm for LNW84, LNW55 only	9.0	109708131	OC3X12X48-IR1-I1	NGI7ASTA
similar to above except 40km		109708149	OC3X12X48-LR1-I1	NGI7ASUA
OC48 CWDM with bail latch SM LC Ch47 1470.0 nm for LNW41, LNW402, LNW55, LNW62, LNW84	9.0	1AB402160002	S2G7C47LI	WOTRB0GT
Ch49 1490.0 nm (DA 6/30/14)		1AB402160003	S2G7C49LI	WOTRB0HT
Ch51 1510.0 nm (DA 6/30/14)		1AB402160004	S2G7C51LI	WOTRB0JT
Ch53 1530.0 nm (DA 6/30/14)		1AB402160005	S2G7C53LI	WOTRB0KT
Ch57 1570.0 nm (DA 6/30/14)		1AB402160007	S2G7C57LI	WOTRB0MT

Features

Table A - DMXtend Shelf and Accessories				
Description	Initial Release	Orderable Code	Apparatus Code	CLEI Code
OC48/STM16/OTU1 DWDM 2.67Gbps 80km 1550 for LNW55, LNW62, LNW41, LNW84, LNW402	5.1			
192.3THz/1558.983nm		109610378	S2D23C6	WOTRAD7C
192.5THz/1557.363nm		109610394	S2D25C6	WOTRAD9C
192.7THz/1555.747nm		109610410	S2D27C6	WOTRAEBC
193.1THz/1552.524nm DA 12/31/14)		109610451	S2D31C6	WOTRAEFC
193.3THz/1550.918nm DA 12/31/14)		109610477	S2D33C6	WOTRAEHC
193.5THz/1549.315nm DA 12/31/14)		109610493	S2D35C6	WOTRAEKC
193.7THz/1547.715nm DA 12/31/14)		109610519	S2D37C6	WOTRAEMC
194.5THz/1541.349nm DA 12/31/14)		109610600	S2D45C6	WOTRAEWC
194.7THz/1539.766nm DA 12/31/14)		109610626	S2D47C6	WOTRAEYC
194.9THz/1538.186nm DA 12/31/14)		109610642	S2D49C6	WOTRAE0C
195.3THz/1535.036nm		109610691	S2D53C6	WOTRAE4C
195.5THz/1533.465nm		109610717	S2D55C6	WOTRAE6C
195.9THz/1530.334nm		109610766	S2D59C6	WOTRAFAC
OC192 2km 1310SM LC for LNW141, LNW603	5.0	109537902	OC192S R1-C1	SOUIAB7F
Similar except 40km 1550nm	5.0	109537563	OC192IR 2-C1	SOUIAB8F
Similar except extended temp 40km 1550nm SM LC for LNW141, LNW705	5.0	109586479	OC192IR 2-I1	SOOTAFKD
Similar except 80km 1550nm SM LC	5.0	109537555	OC192L R2-C1	SOUIAB9F
OC192/STM64/OTU2 11.1Gb/s DWDM-LR 1550nm SM LC				
192.1 THz, 1560.606nm Ch21 (for LNW141)	5.1.1	109615005	X10G21C5	WOTRAFEC
192.1 THz, 1559.794nm Ch22 (for LNW141)		109615013	X10G22C5	WOTRAFFC
192.1 THz 1558.983nm Ch23 (for LNW141)		109615021	X10G23C5	WOTRAFGC
192.1 THz 1558.173nm Ch24 (for LNW141)		109615039	X10G24C5	WOTRAFHC
192.1 THz 1557.363nm Ch25 (for LNW141)		109615047	X10G25C5	WOTRAFJC
192,1 THz 1556.555nm Ch26 (for LNW141)		109615054	X10G26C5	WOTRAFKC
192.1 THz 1555.747nm Ch27 (for LNW141)		109615062	X10G27C5	WOTRAFLC
192.1 THz 1554.940nm Ch28 (for LNW141)		109615070	X10G28C5	WOTRAFMC
193.1 THz 1552.524nm Ch 31 (for LNW141, LNW705)		109615104	X10G31C5	WOTRAFRC
193.3 THz 1550.918nm Ch 33 (for LNW141, LNW705)		109615120	X10G33C5	WOTRAFTC
193.5 THz 1549.315nm Ch 35 (for LNW141, LNW705)		109615146	X10G35C5	WOTRAFVC
193.7 THz 1547.715nm Ch 37 (for LNW141, LNW705)		109615161	X10G37C5	WOTRAFXC
194.5 THz 1541.349nm Ch 45 (for LNW141, LNW705)		109615245	X10G45C5	WOTRAF5C
194.7 THz 1539.766nm Ch 47 (for LNW141, LNW705)		109615260	X10G47C5	WOTRAF7C
194.9 THz 1538.186nm Ch 49 (for LNW141, LNW705)		109615286	X10G49C5	WOTRAF9C

Features

Table A - DMXtend Shelf and Accessories

Description	Initial Release	Orderable Code	Apparatus Code	CLEI Code
195.2 THz 1535.822nm Ch 52 (for LNW141) DA12/31/14)		109615310	X10G52C5	WOTRAGCC
195.3 THz 1535.036nm Ch 53 (for LNW141, LNW603)		109615328	X10G53C5	WOTRAGDC
195.4 THz 1534.250nm Ch 54 (for LNW141) DA12/31/14)		109615336	X10G54C5	WOTRAGEC
195.5 THz 1533.465nm Ch 55 (for LNW141)		109615344	X10G55C5	WOTRAGFC
195.6 THz 1532.681nm Ch 56 (for LNW141, LNW603) DA12/31/14)		109615351	X10G56C5	WOTRAGGC
195.7 THz 1531.898nm Ch 57 (for LNW141) DA12/31/14)		109615369	X10G57C5	WOTRAGHC
195.8 THz 1531.116nm Ch 58 (for LNW141, LNW603) DA12/31/14)		109615377	X10G58C5	WOTRAGJC
195.9 THz 1530.334nm Ch 59 (for LNW141)		109615385	X10G59C5	WOTRAGKC
100 MbE 100BASE-LX-I1 1310nm SM for LNW74, LNW170, LNW87, LNW910	3.0	109527812	OMFE	SOOTACKD
100MbE 1550nm SM 100BASE-ZX IT for LNW87 LNW170 LNW74 (DA 12/31/14)	9.0	109703157	100BASE-ZX-I1	NGI7AR92
100MbE 1310nm MM 100BASE-FX IT for LNW87 LNW170 LNW74		109703140	100BASE-FX-I1	NGI7AR82
GbE-1X/2XFC-1000BaseSX(XT)-I1 XT Short 850nm MultiMode, for LNW170, LNW63, LNW64, LNW73, LNW87, LNW705, LNW910	R4.0	109570606	OM1G/OMFC	SOOTAE8D
GbE-1X/2XFC-1000BaseLX(XT)-I1 XT Long 1310nm Single Mode, for LNW170, LNW63, LNW64, LNW73, LNW87, LNW705, LNW910	R4.0	109568782	OM1G/OMFC	SOOTAETD
GbE 1000Base-ZX-I1 Extended 1550nm Single Mode, for LNW170, LNW63, LNW64, LNW87, LNW910	R4.0	109541862	OM1G	SOOTAC2D
GbE/100MbE/10 1000/100/10 Base-T-C1 Electrical, for LNW170, LNW63, LNW64, LNW87	R4.0	109565549	EM1G/EMFE	SOOTAERD
100/1000Base-T(XT) Electrical for LNW910	R10.0	109603134	EM1G/EMFE	WOTRAC6C
10GBase-LR, 10km, 1310nm, SM, XT for LNW910	R10.0	109603704	OM10G	WOTRAC8C
10GBase-ER, 40km, 1550nm, SM, XT for LNW910	R10.0	109603712	OM10G	WOTRAC9C
10GBase-ZR, 80km, 1550nm, SM, XT for LNW910	R10.0	109603720	OM10G	WOTRADAC

Table B - DMXtend Cable Assemblies

Description	Eng. Note	Length (FT)	Orderable Code
DS1#1-28 Cables dress right per rear view, 24 gauge, 62 pin plug (DMXtend) to far end un-terminated. one code provides one input and one output cable for 28 DS1's. for example, if using the LNW7 (28 DS1) in Function Group D (or G), order one code to connect to: J1D(IN) = DS1 IN#1-28 and J3D(OUT) = DS1 OUT#1-28 (or J7G(IN) = DS1 IN#1-28 and J9G(OUT) = DS1 OUT#1-28) for example, if using the 56 DS1 LNW8, order one "dress right" code for DS1#1-28, plus one "dress left" code for DS1#29-56	13	10	848954962
	13	20	848954970
	13	30	848934964
	13	50	848912473
	13	75	848934972
	13	100	848912564
	13	125	848934980
	13	150	848912648
	13	175	848934998
	13	200	848935003
	13	250	848912671
		350	848912978
		550	848913000
	13	10	848954988
	13	20	848955001
DS1#29-56 Cables dress left per rear view, 24 gauge, 62 pin plug (DMXtend) to far end un-terminated. for example, one code provides one input and one output cable for DS1#29-56 of the 56 DS1 LNW8 in Function Group D (or G), order one code to connect to: J2D(IN) = DS1 IN#29-56 and J4D(OUT) = DS1 OUT#29-56 (or J8G(IN) = DS1 IN#29-56 and J10G(OUT) = DS1 OUT#29-56) plus, order one "dress right" code for DS1#1-28 of the 56 DS1 LNW8	13	30	848923074
	13	50	848548327
	13	75	848923082
	13	100	848548335
	13	125	848923090
	13	150	848548343
	13	175	848923108
	13	200	848923116
	13	250	848548350
		350	848790762
		550	848790770

Features

Table B - DMXtend Cable Assemblies			
Description	Eng. Note	Length (FT)	Orderable Code
DS3#1-12 Cables, for LNW16, LNW18 Dress right per rear view Each code provides one "DS3#1-12 IN" cable and one "DS3#1-12 OUT" cable. The DS3#1-12 IN cable is one 62 pin plug (DMX backplane) connected to 12 735A coaxial cables with no customer end connectors. The DS3#1-12 OUT cable is physically the same except for labeling. See below for customer end BNC plugs, order at least 24. If growth to 24 DS3 is possible, use the DS3#1-24 cables below instead. Example: for a 12 DS3 LNW16 in Function Group D, order one 849040787 to receive one 10ft OUT cable to connect to J3D OUT and one 10ft IN cable for J1D IN 450ft is the max amount of 735A allowed between two DMXtends. 849041751 uses ~10ft 735A spliced to 734D cable, 900ft is the max amount of 734D allowed between two DMXtends. The splice is factory made. Stagger these splices in the cable rack to save space.	13	10	849040787
	13	20	849040795
	13	30	849040803
	13	40	849040811
	13	50	849040829
	13	60	849040837
	13	100	849040845
	13	150	849040852
	13	250	849040860
		450	849041751
The following kits include 12 individually bagged BNCs with instructions plus one spare: KINGS 75ohm 735A cable type (12) BNC Plug Kit	13		848965778
TROMPETER 75ohm 735A cable type (12) BNC Plug Kit	13		848965794
ADC 75ohm 735A cable type (25) BNC Plug Kit, individual w/ instructions	13		849058292
ADC 75ohm 735A cable type (6) BNC Plug Kit, individual w/ instructions	13		849058284
DS3#1-24 "Dress Right" Cables per rear view Each code provides one "DS3#1-24 IN" cable and one "DS3#1-24 OUT" cable. The DS3#1-24 IN cable is one 62 pin plug (DMX backplane) connected to 24 735A coaxial cables with no customer end connectors. The DS3#1-24 OUT cable is physically the same except for labeling. See below for customer end BNC plugs, order at least 48. Example: for a 48 DS3 LNW19B or LNW20 in Function Group D, order one 849041108 to receive one 10ft IN cable to connect to J1D DS3IN#1-24 and one 10ft OUT cable for J3D DS3OUT#1-24, and see below to order one "Dress Left" code for DS3#25-48 (the first 12 DS3 connections will also cable the 12 DS3 LNW16 or 12Transmux LNW18) 450ft is the maximum amount of 735A cable allowed between two DMXtends.	13	10	849041108
	13	20	849041116
	13	30	849041124
	13	40	849041132
	13	50	849041140
		60	849041157
		70	849041165
		80	849041173
		90	849041181
	13	100	849041199
		110	849041207
		120	849041215
	13	140	849041223
	13	150	849041231
		180	849041256
		200	849041264
		250	849041272
similar to previous except ~10ft of 735A spliced to 734D coaxial cable. This splice is factory made. Stagger the splices in the cable rack to save space. 900ft is the maximum amount of 734D allowed between two DMXtends.		250	849041892
		300	849041926

Features

Table B - DMXtend Cable Assemblies			
Description	Eng. Note	Length (FT)	Orderable Code
These kits include 24 individually bagged BNCs w/ assembly instructions plus 1 spare: KINGS 75ohm 735A cable type (24) BNC Plug Kit	13		848963062
KINGS 75ohm 734D cable type (24) BNC Plug Kit	13		848963070
TROMPETER 75ohm 735A cable type (24) BNC Plug Kit	13		848963088
TROMPETER 75ohm 734D cable type (24) BNC Plug Kit	13		848963096
ITT CANON 75ohm 735A cable type (24) BNC Plug Kit	13		409013554
ITT CANON 75ohm 734D cable type (24) BNC Plug Kit	13		409013588
These kits include 50 individually bagged BNCs w/ assembly instructions: ITT CANON 75ohm 735A cable type (50) BNC Plug Kit	13		409013562
ITT CANON 75ohm 734D cable type (50) BNC Plug Kit	13		409013570
ADC 75ohm 735A cable type (50) BNC Plug Kit	13		849058300
DS3#25-48 "Dress Left" Cables per rear view Each code provides one "DS3#25-48 IN" cable and one "DS3#25-48 OUT" cable. The DS3#25-48 IN cable is one 62 pin plug (DMX backplane) connected to 24 735A coaxial cables with no customer end connectors. The DS3#25-48 OUT cable is physically the same except for labeling. See above for customer end BNC plugs, order at least 48. Example: for a 48 DS3 LNW19B or LNW20 in Function Group D, order one "Dress Right" code above to connect to J1D DS3IN#1-24 and J3D DS3OUT#1-24, and order one 849040886 to receive one 10ft IN cable to connect to J2D DS3IN#25-48 and one 10ft OUT cable for J4D DS3OUT#25-48 450ft is the maximum amount of 735A cable allowed between two DMXtends.	13	10	849040886
	13	20	849040894
	13	30	849040902
	13	40	849040910
	13	50	849040928
	13	60	849040936
	13	70	849040944
	13	80	849040951
	13	90	849040969
	13	100	849040977
	13	110	849040985
	13	120	849040993
	13	140	849041009
	13	150	849041017
	13	160	849041025
	13	180	849041033
	13	200	849041041
	13	250	849041066
similar to above except ~10ft of 735A spliced to 734D coaxial cable. This splice is factory made. Stagger the splices in the cable rack to save space. 900ft is the maximum amount of 734D allowed between two DMXtend.		300	849041074
	13	250	849041785
		275	849041793
		300	849041801
		325	849041819
		350	849041827
		450	849041868

Features

Table B - DMXtend Cable Assemblies			
Description	Eng. Note	Length (FT)	Orderable Code
16DS1 / 3DS3 Hybrid Cables w/ No BNC dress right per rear view Each code provides one input and one output cable. The input cable is a 62 pin plug (DMX backplane) terminated to both DS1 twisted pairs and three coaxial 735A cables, and the customer end has no connectors. The output cable is physically the same except for labels. For example, one code provides one input and one output cable to connect to A/B Function Group J5A/B(IN) and J6A/B(OUT)	13	10	849041561
	13	20	849041579
	13	30	849041587
	13	50	849041595
	13	75	849041603
	13	100	849041611
	13	125	849041629
		150	849041637
		200	849041652
		50	849006903
16DS1 / 3DS3 Hybrid Cables w/ No BNC, Customer Specific similar to above hybrids except the DS3 is short and staggered for interbay use	13	75	849006911
	13	100	849006929
	13	125	849006937
	13	150	849006952
	13	175	849006960
	13	200	849006978
	13	250	849006986
	13	350	849006994
Miscellaneous Discretes (J20) Cable right angle connector	13	15	848979399
	13	30	848979407
	13	50	848549598
		100	848549606
	13	150	848549614
X.25 (J19) to X.25 Cables (Pre-R4.0 only) as required by network design	13	100	848549663
	13	150	848549689
X.25 (J19) to Switch Cables (Pre-R4.0 only) as required by network design	13	50	848570792
	13	100	848570818
		150	848570826
Office Alarm Cable (J13 Out) One code is required for the bay's lowest DMXtend (J13 Out) to the customer patch panel. Then use the Office Alarm Mult cable, below, for additional DMXtend shelves in that bay.	13	50	848558193
	13	100	848562286
	13	150	848562294
	13	250	848562302
Office Alarm Mult Cable (J13 Out to J14 In) one code is required for each additional DMXtend in the bay above the lowest DMXtend. Connect the adjacent, upper DMXtend J13 Out to the lower DMXtend J14 In.	13	3	848589602

Features

Table B - DMXtend Cable Assemblies			
Description	Eng. Note	Length (FT)	Orderable Code
Sync1 (J11) and Sync2 (J12) Cables, Straight connector 2 cables per code, as required by network design.	13	50	848839619
	13	75	848923363
	13	100	848839627
	13	125	848923371
	13	150	848839635
		175	848923389
	13	200	848923439
		225	848923447
	13	250	848839643
	13	300	848923462
	13	450	848839650
Modem (J18) Cable as required by network design.	13	50	848756508
	13	100	848756524
		250	848756532
System Controller Ethernet LAN Crossover Cable, RJ45 plug to RJ45 plug for (J17) or System Controller's LAN interface to a PC's LAN card. one cable per code	13	10	109321810
	13	50	848605028
	13	100	848605036
		200	848605069
CAT5e Ethernet RJ45 Connector / SFP Cables, CAT5e GbE Shielded, RJ45 Connector Both Ends	13	5	849010483
	13	10	849010491
		15	849010509
		25	849010525
	13	50	849010558
		150	849010657
Ethernet Backplane Cables, 62 pin plug (DMXtend) to far end un-terminated dress left per rear view one code provides one "Port 1-12" cable and one "Port 13-24" cable Ports 1-12 use (J3D) or (J9G) (OUT) only Ports 13-24 use (J1D) or (J7G) (IN) only At the customer end, these wire to RJ45 Punch Down Blocks, provided by the customer, to convert to RJ45 Receptacles. Connect the cable's shield drain wire to the Block's ground connection if it has one. Otherwise, cut the drain wire at the cable insulation. (DMXtend cables are grounded at the DMXtend backplane.)	13	8	848819090
	13	20	848778114
	13	35	848923280
	13	50	848778122
	13	75	848923298
	13	100	848778106
	13	125	848923306
	13	150	848778148
		175	848923314
		200	848923322
		225	848923330
		250	848923348
		275	848923355
		300	848778130
Ethernet Backplane Cables, 62 pin plug (DMXtend) to far end un-terminated dress left per rear view one code provides one "Port 1-12" cable and one "Port 13-24" cable Ports 1-12 use (J3D) or (J9G) (OUT) only Ports 13-24 use (J1D) or (J7G) (IN) only			

Table B - DMXtend Cable Assemblies			
Description	Eng. Note	Length (FT)	Orderable Code
System Controller Ethernet LAN Straight Through Cable, RJ45 plug to RJ45 plug for (J17) or System Controller's LAN interface to a LAN Hub / Router. one cable per code	13	8	848748869
	13	20	109321836
	13	30	109321844
	13	40	109321851
	13	50	848604948
	13	60	109321869
	13	70	109321877
	13	80	109321885
	13	90	109321893
	13	100	848604955
		110	109321901
		120	109321919
		130	109321927
		140	109321935
	13	150	848604963
		160	109321943
		180	109321950
	13	200	848604971
		220	109321968
		240	109321976
		280	109321992
	13	300	848604997
Power Cable Kits, 2 cables (PWR A and PWR B) per code, right angle DMXtend power connector on one end, the far end un-terminated 848999496 is 14ga, connects to cabinets' 14ga Phoenix screw block only	6ga	85	848929493
		100	848929501
	13 8ga	55	848929519
	13 10ga	12	848929535
	13 10ga	50	848929543
	10ga	75	848929550
	10ga	100	848929568
	13	15	848999496

Table C - DMXtend Single Mode Fibers, see Note 9

FT	Angled LC to Angled LC	Angled LC to Straight LC	Angled LC to Straight SC		
2	109462168	-	-		
4	109462176	-	109463026		
6	-	109462218	-		
8	-	109462226	-		
10	-	109462234	-		
15	109462184	-	109463067		
20	-	-	-		
25	-	109462267	109463083		

Table C1 - Customer Specific Single Mode Fibers, see Note 9		
For OFS Blue Tiger Simplex Mini-Cord Fiber: first order 109602201 LWSMC-001C-SRB fiber and specify the length required, then order one of the following to specify the connectors for each end.		
Angled LC to Angled LC	109637538	LWSMSB1-A40LC-A40LC
Angled LC to LC (straight)	109637546	LWSMSB1-LC-A40LC
Angled LC to SC	109615831	LWSMSB1-SC-A40LC
Angled LC to FC	109615849	LWSMSB1-FC-A40LC
Angled LC to ST	109615856	LWSMSB1-ST-A40LC
Angled LC to SCA	109659094	LWSMSB1-SCA-A40LC
For OFS Blue Tiger Duplex Mini-Cord / Zip cord Fiber: first order 109611814 LWSMC-002C-SRB fiber and specify the length required, then order one of the following to specify the connectors for each end.		
Angled LC to Angled LC	109637553	LWSMSB2-A40LC-A40LC
Angled LC to LC (straight)	109637561	LWSMSB2-LC-A40LC
Angled LC to FC	109615872	LWSMSB2-FC-A40LC
Angled LC to ST	109615898	LWSMSB2-ST-A40LC
Angled LC to SCA	109659102	LWSMSB2-SCA-A40LC
For OFS Blue Tiger 2 Fiber Round Riser Rated (39 inch breakout each end) Fiber: first order 109615401 LWSMC-002C-BRB fiber and specify the length required, then order one of the following to specify the connectors for each end.		
Angled LC to Angled LC	109656637	LWSMC2B-A40LC-A40LC
Angled LC to LC (straight)	109656645	LWSMC2B-LC-A40LC
Angled LC to SC	109656652	LWSMC2B-SC-A40LC
Angled LC to FC	109656660	LWSMC2B-FC-A40LC
Angled LC to SCA	109659110	LWSMC2B-SCA-A40LC
For OFS Blue Tiger 4 Fiber Round Riser Rated (39 inch breakout each end) Fiber: first order 109615419 LWSMC-004C-BRB fiber and specify the length required, then order one of the following to specify the connectors for each end.		
Angled LC to Angled LC	109656728	LWSMC4B-A40LC-A40LC
Angled LC to LC (straight)	109656736	LWSMC4B-LC-A40LC
Angled LC to SC	109656744	LWSMC4B-SC-A40LC
Angled LC to FC	109656751	LWSMC4B-FC-A40LC
Angled LC to ST	109656769	LWSMC4B-ST-A40LC
Angled LC to SCA	109659128	LWSMC4B-SCA-A40LC

Table D - DMXtend Software and Documentation

Description	Comcode
R3.1.3 (see "About This Document" and Notes 14, 15)	
R3.1.3 Initial Application Kit	109607002
R3.1.3 Maintenance Upgrade Application (CN)	109607069
R3.1.3 Software Release Description (OLCS downloadable)	109606988
R3.1 User Operations Guide, 365-372-325R3.1 (OLCS downloadable)	109536268
R3.1 Installation Manual, 365-372-327R3.1 (OLCS downloadable)	109536284
R3.1 Alarm Messages and Trouble Clearing Guide, 365-372-326R3.1 (OLCS downloadable)	109536276
R3.1 TL1 Message Details, 365-372-328R3.1 (OLCS downloadable)	109536292
Kit of one hard copy of each of the above six documents (OLCS downloadable)	849003132
Engineering and Ordering Information, ED8C951-10 (OLCS downloadable)	300578366
Interconnect Information, ED8C951-20 (OLCS downloadable)	300578374
R3.1.7 (customer specific) (see "About This Document" and Notes 14, 15)	
R3.1.7 Initial Application Kit	109684746
R3.1.x (x=3,4,5, 6) to 3.1.7 Upgrade Kit	109684761
R3.1.7 SRD CD	109684738
R3.1.7 Software Release Description (OLCS downloadable)	109684720
R5.1.1 (see "About This Document" and Notes 14, 15)	
R5.1.1 Initial Application Kit (DA 12/31/13)	109674937
R1.1 to (3.1.3 to 5.0.2) to 5.1.1 Upgrade Kit (DA 12/31/13)	109674952
R2.0 to (3.1.3 to 5.0.2) to 5.1.1 Upgrade Kit (DA 12/31/13)	109674960
R3.0 to (3.1.3 to 5.0.2) to 5.1.1 Upgrade Kit (DA 12/31/13)	109674978
R3.1.x (x = 3, 4, 5, 6) to (5.0.2 to) 5.1.1 Upgrade Kit (DA 12/31/13)	109674986
R4.0.x (x = 1, 2, 3, 4) to 5.1.1 Upgrade Kit (DA 12/31/13)	109674994
R5.0.2 to 5.1.1 Upgrade Kit (DA 12/31/13)	109675009
R5.1.1 Software Release Description CD (DA 12/31/13)	109674929
R5.1.1 Software Release Description (OLCS downloadable)	109674911
R5.1.1 / 7.1.1 / 4.1 CIT Software (DA 12/31/13)	109678847
R5.1 Applications and Planning Guide, 365-372-324 (OLCS downloadable)	109666453
R5.1 User Operations Guide, 365-372-325 (OLCS downloadable)	109666412
R5.1 Installation Manual, 365-372-327 (OLCS downloadable)	109666438
R5.1 Alarm Messages and Trouble Clearing Guide, 365-372-326 (OLCS downloadable)	109666420
R5.1 TL1 Message Details, 365-372-328 (OLCS downloadable)	109666446
Engineering and Ordering Information, ED8C951-10 (OLCS downloadable)	300578366
Interconnect Information, ED8C951-20 (OLCS downloadable)	300578374

Table D - DMXtend Software and Documentation	
Description	Comcode
R5.1.2 (see “About This Document” and Notes 14, 15)	
R5.1.2 Initial Application Kit	109686436
R1.1 to (3.1.3 to 5.0.2) to 5.1.2 Upgrade Kit	109686451
R2.0 to (3.1.3 to 5.0.2) to 5.1.2 Upgrade Kit	109686469
R3.0 to (3.1.3 to 5.0.2) to 5.1.2 Upgrade Kit	109686477
R3.1.5 to (5.0.2 to) 5.1.2 Upgrade Kit	109686485
R3.1.3, R3.1.4 or R3.1.7 to 5.1.2 Upgrade Kit	109686501
R4.0.x (x = 1, 2, 3, 4) to 5.1.2 Upgrade Kit	109686493
R5.0.2 to 5.1.2 Upgrade Kit	109686519
R5.1.1 to 5.1.2 Upgrade Kit	109686527
R5.1.2 Software Release Description CD (spare)	109686428
R5.1.2 Software Release Description (OLCS downloadable)	109686410
R5.1.2 / 7.1.2 / 5.0 CIT Software	109686535
R8.0 (see “About This Document” and Notes 14, 15)	
R8.0 Applications and Planning Guide, 365-372-324 (OLCS downloadable)	109681031
R8.0 User Operations Guide, 365-372-325 (OLCS downloadable)	109680991
R8.0 Installation Manual, 365-372-327 (OLCS downloadable)	109681015
R8.0 Alarm Messages and Trouble Clearing Guide, 365-372-326 (OLCS downloadable)	109681007
R8.0 TL1 Message Details, 365-372-328 (OLCS downloadable)	109681023
Engineering and Ordering Information, ED8C951-10 (OLCS downloadable)	300578366
Interconnect Information, ED8C951-20 (OLCS downloadable)	300578374
CIT Release Compatibility Matrix, 3EM000030550CIZZA	-
R8.0.3 (see “About This Document” and Notes 14, 15)	
Customer Specific R8.0.3 Initial Application Kit (DA 6/30/14)	109743435
Customer Specific R1.1.x to (3.1.3 to) 8.0.3 Upgrade Kit (DA 6/30/14)	109743450
Customer Specific R2.0.x to (3.1.3 to) 8.0.3 Upgrade Kit (DA 6/30/14)	109743468
Customer Specific R3.1.3/3.1.7 to 8.0.3 Upgrade Kit (DA 6/30/14)	109743476
Customer Specific R3.1.6 to (5.1.2 to) 8.0.3 Upgrade Kit (DA 6/30/14)	109743484
Customer Specific R4.0.3 to (5.1.2 to) 8.0.3 Upgrade Kit (DA 6/30/14)	109743492
Customer Specific R5.0.3 to 8.0.3 Upgrade Kit (DA 6/30/14)	109743500
Customer Specific R8.0.3 Software Release Description CD (DA 6/30/14)	109743427
Customer Specific R8.0.3 Software Release Description (OLCS downloadable) (DA 6/30/14)	109743419

Table D - DMXtend Software and Documentation

Description	Comcode
R8.0.5 (see “About This Document” and Notes 14, 15)	
R8.0.5 Initial Application Kit	109759118
R8.0.5 R1.1 Upgrade Kit	109759134
R8.0.5 R2.0 Upgrade Kit	109759142
R8.0.5 R3.0 Upgrade Kit	109759159
R8.0.5 R3.1.X Upgrade Kit	109759167
R8.0.5 R4.0.1/R4.0.4 Upgrade Kit	109759175
R8.0.5 R5.0.2 Upgrade Kit	109759183
R8.0.5 R5.1.1/R5.1.2 Upgrade Kit	109759191
R8.0.5 R8.0.2/R8.0.4 Upgrade Kit	109759209
R8.0.5 Software Release Description, (OLCS downloadable)	109759092
R8.0.5 Software Release Description, CD	109759100
R8.0.5 DMX / DMXtend CIT software, including Unite R11.1.1	109759076
R8.0.5 DMX / DMXtend CIT software, including Unite R10.5.4	109759084
R8.0.5 DMX / DMXtend CIT software, including TSS-5 R7.1.0 and Unite R10.5.4	109760397
R8.0.5 DMX / DMXtend CIT software, including TSS-5 R7.1.0 and Unite R11.1.1	109760405
R8.0.5 DMX / DMXtend CIT software, including TSS-5 R7.2.0 and Unite R10.5.4	109760413
R8.0.6 (See “About This Document” and Notes 14, 15)	
R8.0.6 Initial Application Kit	109770222
R8.0.6 R5.1.1 Upgrade Kit	109770248
R8.0.6 R8.0.5 Upgrade Kit	109770255
R8.0.6 Software Release Description, (OLCS downloadable)	109770206
R8.0.6 Software Release Description, CD	109770230
R9.0.1 (see “About This Document” and Notes 14, 15)	
R9.0 Product Information & Planning Guide (OLCS downloadable)	109696757
R9.0 User Provisioning Guide (OLCS downloadable)	109696674
R9.0 Maintenance and Trouble Clearing Guide (OLCS downloadable)	109696682
R9.0 Installation and System Turn up Guide (OLCS downloadable)	109696708
R9.0 TL1 Command Guide (OLCS downloadable)	109696724
Engineering and Ordering Information, ED8C951-10 (OLCS downloadable)	300578366
Interconnect Information, ED8C951-20 (OLCS downloadable)	300578374
CIT Release Compatibility Matrix, 3EM000030550CIZZA	-

Table D - DMXtend Software and Documentation

Description	Comcode
R9.0.1 Initial Application Kit	109771725
R1.1 to R9.0.1 Upgrade Kit	109771741
R2.0 to R9.0.1 Upgrade Kit	109771758
R3.0 to R9.0.1 Upgrade Kit	109771766
R3.1.4/R3.1.5 to R9.0.1 Upgrade Kit	109771774
R3.1.3/R3.1.7 to R9.0.1 Upgrade Kit	109771782
R4.0.1/R4.0.4 to R9.0.1 Upgrade Kit	109771790
R4.0.2 to R9.0.1 Upgrade Kit	109771808
R5.0.2 to R9.0.1 Upgrade Kit	109771816
R5.1.1 to R9.0.1 Upgrade Kit	109771824
R5.1.2 to R9.0.1 Upgrade Kit	109771832
R5.1.4 to R9.0.1 Upgrade Kit	109771840
R8.0.2/R8.0.4/R8.0.5/R8.0.6 to R9.0.1 Upgrade Kit	109771857
R9.0 to R9.0.1 Upgrade Kit	109771865
Customer Specific R9.0.1 Initial Application Kit	109771873
Customer Specific R1.1 to R9.0.1 Upgrade Kit	109771899
Customer Specific R2.0 to R9.0.1 Upgrade Kit	109771907
Customer Specific R3.1.3/R3.1.7 to R9.0.1 Upgrade Kit	109771923
Customer Specific R3.1.6 to R9.0.1 Upgrade Kit	109771915
Customer Specific R4.0.3 to R9.0.1 Upgrade Kit	109771931
Customer Specific R5.0.3 to R9.0.1 Upgrade Kit	109771949
Customer Specific R8.0.3 to R9.0.1 Upgrade Kit	109771956
R9.0.1 DMX / DMXtend CIT software, including Unite R11.1.x	109771667
R8.0.5 DMX / DMXtend CIT software, including Unite R10.5.4	
R9.0.1 DMX/DMXtend CIT software, including Unite R10.5.x	109773002
R9.0.1 Software Release Description (OLCS downloadable)	109771709
R9.0.1 Software Release Description, CD	109771717
R9.0.3 (see "About This Document" and Notes 14, 15)	
Customer Specific R9.0.3 Initial Application Kit	109802074
Customer Specific R9.0.1 to R9.0.3 Upgrade Kit	109802082
R9.0.3 Software Release Description (OLCS downloadable)	109802041
R9.0.3 Software Release Description, CD	109802058

Features

Table D - DMXtend Software and Documentation

Description	Comcode
R9.1 (see “About This Document” and Notes 14, 15)	
R9.1 Initial Application Kit (DA 12/31/13)	109783480
R3.1.4/R3.1.5 to R9.1 Upgrade Kit (DA 12/31/13)	109783514
R3.1.3/R3.1.7 to R9.1 Upgrade Kit (DA 12/31/13)	109783506
R4.0.1/R4.0.2/R4.0.4 to R9.1 Upgrade Kit (DA 12/31/13)	109783522
R5.0.2 to R9.1 Upgrade Kit (DA 12/31/13)	109783530
R5.1.1/R5.1.2/R5.1.4 to R9.1 Upgrade Kit (DA 12/31/13)	109783548
R8.0.2/R8.0.4/R8.0.5/R8.0.6 to R9.1 Upgrade Kit (DA 12/31/13)	109783555
R9.0.1 to R9.1 Upgrade Kit (DA 12/31/13)	109783563
Customer Specific R9.1 Initial Application Kit (DA 12/31/13)	109783571
Customer Specific R3.1.3/R3.1.7 to R9.1 Upgrade Kit (DA 12/31/13)	109783597
Customer Specific R8.0.3 to R9.1 Upgrade Kit (DA 12/31/13)	109783605
Customer Specific R9.0.1 to R9.1 Upgrade Kit (DA 12/31/13)	109783613
R9.1 DMX/DMXtend CIT software, including Unite R11.1.x (DA 12/31/13)	109783340
R9.1 DMX/DMXtend CIT software, including Unite R10.5.x (DA 12/31/13)	109783357
R9.1 Customer Release Notes (OLCS downloadable) (DA 12/31/13)	109783654
R9.1 Customer Release Notes, CD (DA 12/31/13)	109783464
R9.1 Documentation CD	109783472
R9.1.1 (see “About This Document” and Notes 14, 15)	
R9.1.1 Initial Application Kit	109793349
R3.1.4/R3.1.5/R3.1.7 to R9.1.1 Upgrade Kit	109793372
R3.1.3 to R9.1.1 Upgrade Kit	109793364
R4.0.1/R4.0.2/R4.0.4 to R9.1.1 Upgrade Kit	109793380
R5.0.2 to R9.1.1 Upgrade Kit	109793398
R5.1.1/R5.1.2 to R9.1.1 Upgrade Kit	109793406
R8.0.x to R9.1.1 Upgrade Kit	109793414
R9.0.1 to R9.1.1 Upgrade Kit	109793422
R9.1 to R9.1.1 Upgrade Kit	109793430
R9.1.1 DMX/DMXtend CIT software, including Unite R11.1.x	109793448
R9.1.1 DMX/DMXtend CIT software, including Unite R10.5.x	109793455
R9.1.1 Customer Release Notes (OLCS downloadable)	109793323
R9.1.1 Customer Release Notes, CD	109793331

Features

Table D - DMXtend Software and Documentation	
Description	Comcode
R10.0 (see “About This Document” and Notes 14, 15)	
R10.0 Initial Application Kit	109789198
R3.1.3/R3.1.7 to R10.0 Upgrade Kit	109789214
R3.1.4/R3.1.5 to R10.0 Upgrade Kit	109789222
R4.0.1/R4.0.2/R4.0.4 To R10.0 Upgrade Kit	109789230
R5.0.2 to R10.0 Upgrade Kit	109789248
R5.1.1/R5.1.2/R5.1.4 to R10.0 Upgrade Kit	109789255
R8.0.2/R8.0.4/R8.0.5/R8.0.6 to R10.0 Upgrade Kit	109789263
R9.0.1 to R10.0 Upgrade Kit	109789271
R9.1 to R10.0 Upgrade Kit	109789289
Customer Specific R10.0 Initial Application Kit	109789297
Customer Specific R3.1.3/R3.1.7 to R10.0 Upgrade Kit	109789313
Customer Specific R8.0.3 to R10.0 Upgrade Kit	109789321
Customer Specific R9.0.1 to R10.0 Upgrade Kit	109789339
Customer Specific R9.1 to R10.0 Upgrade Kit	109789347
R10.0 DMX/DMXtend CIT software, including Unite R11.1.x	109789081
R10.0 DMX/DMXtend CIT software, including Unite R10.5.x	109789099
R10.0 Customer Release Notes (OLCS downloadable)	109789164
R10.0 Customer Release Notes, CD	109789172
R10.0 Documentation Library (OLCS downloadable)	109789180
R10.0.1 (see “About This Document” and Notes 14, 15)	
R10.0.1 Initial Application Kit	109802934
R3.1.3/R3.1.7 to R10.0.1 Upgrade Kit	109802959
R3.1.4/R3.1.5 to R10.0.1 Upgrade Kit	109802967
R4.0.1/R4.0.2/R4.0.4 to R10.0.1 Upgrade Kit	109802975
R5.0.2 to R10.0.1 Upgrade Kit	109802983
R5.1.1/R5.1.2/R5.1.4 to R10.0.1 Upgrade Kit	109802991
R8.0.2/R8.0.4/R8.0.5/R8.0.6 to R10.0.1 Upgrade Kit	109803007
R9.0.1/R9.0.3 to R10.0.1 Upgrade Kit	109803015
R9.1.x to R10.0.1 Upgrade Kit	109803023
R10.0.0 to R10.0.1 Upgrade Kit	109803031
R10.0.1 DMX/DMXtend CIT software, including Unite R11.1.x	109802868
R10.0.1 DMX/DMXtend CIT software, including Unite R10.5.x	109802876
R10.0.1 DMX/DMXtend CIT software, including Unite R11.1.x & R10.5.x	109802884
R10.0.1 Customer Release Notes (OLCS downloadable)	109802918
R10.0.1 Customer Release Notes, CD	109802926

Table D - DMXtend Software and Documentation

Description	Comcode
R10.0.2 (see "About This Document" and Notes 14, 15)	
R10.0.2 Initial Application Kit	109809582
R10.0.2 R3.1.3/R3.1.7 Upgrade Kit	109809608
R10.0.2 R3.1.4/R3.1.5 Upgrade Kit	109809616
R10.0.2 R4.0.1/R4.0.2/R4.0.4 Upgrade Kit	109809624
R10.0.2 R5.0.2 Upgrade Kit	109809632
R10.0.2 R5.1.1/R5.1.2/R5.1.4 Upgrade Kit	109809640
R10.0.2 R8.0.2/R8.0.4/R8.0.5/R8.0.6 Upgrade Kit	109809657
R10.0.2 R9.0.1 Upgrade Kit	109809665
R10.0.2 R9.1 Upgrade Kit	109809673
R10.0.2 R10.0.0/R10.0.1 Upgrade Kit	109809681
R10.0.2 Customer Release Notes (OLCS downloadable)	109809566
R10.0.2 Customer Release Notes CD	109809574
CIT SW for 1665 DMX R10.0.2, 1665 DMXTEND R10.0.2 & TSS-5 R7.2.6 with Unite R10.5.x	109809541
CIT SW for 1665 DMX R10.0.2, 1665 DMXTEND R10.0.2 & TSS-5 R7.2.6 with Unite R11.1.x	109809533
CIT SW for 1665 DMX R10.0.2, 1665 DMXTEND R10.0.2 & TSS-5 R7.2.6 with Unite R10.5.x & R11.1.x	109809558
R10.0.3 (see "About This Document" and Notes 14, 15)	
R10.0.3 Initial Application Kit	109811653
R10.0.3 R3.1.3 Upgrade Kit	109811679
R10.0.3 R3.1.4/R3.1.5/R3.1.7 Upgrade Kit	109811687
R10.0.3 R4.0.1/R4.0.2/R4.0.4 Upgrade Kit	109811695
R10.0.3 R5.0.2 Upgrade Kit	109811703
R10.0.3 R5.1.1/R5.1.2/R5.1.4 Upgrade Kit	109811711
R10.0.3 R8.0.2/R8.0.4/R8.0.5/R8.0.6 Upgrade Kit	109811729
R10.0.3 R9.0.1 Upgrade Kit	109811737
R10.0.3 R9.1 Upgrade Kit	109811745
R10.0.3 R10.0.0/R10.0.1/R10.0.2 Upgrade Kit	109811752
R10.0.3 Customer Release Notes (OLCS downloadable)	109811638
R10.0.3 Customer Release Notes CD	109811646
CIT SW for 1665 DMX R10.0.3, 1665 DMXTEND R10.0.3 & TSS-5 R7.2.6 with Unite R10.5.x	109811588
CIT SW for 1665 DMX R10.0.3, 1665 DMXTEND R10.0.3 & TSS-5 R7.2.6 with Unite R11.1.x	109811570
CIT SW for 1665 DMX R10.0.3, 1665 DMXTEND R10.0.3 & TSS-5 R7.2.6 with Unite R10.5.x & R11.1.x	109811596

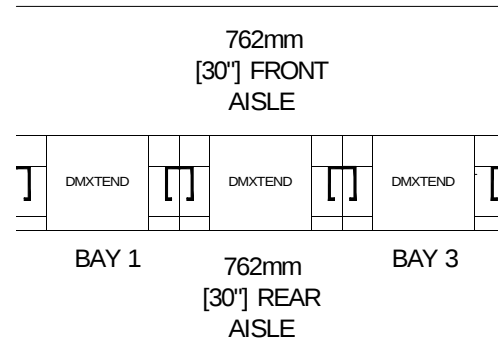
Floor Plan Data, 1665 DMXtend

Table 1 - Power and Current Drains			
Shelf Power Feeds A and B, each with 10 Amp Breaker	Maximum, see Note 12	One Feed at -40 VDC	9.5A x 40V = 380W
		One Feed at -48 VDC	380W / 48V = 7.9A
	Examples, see Note 12	One Feed at -48 VDC	181.4W / 48V = 3.78A
		One Feed at -40 VDC	181.4W / 40V = 4.54A
The shelf is designed to work from -40.0 to -57.0 VDC			

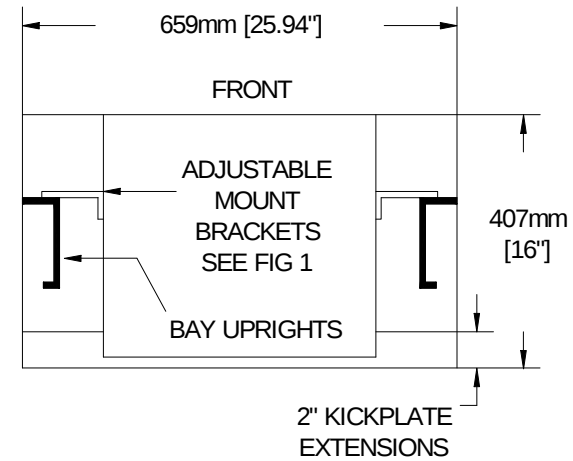
Table 2 - Voltage Drop for List 2X Drain (per Power Cable Gauge / Length)				
Looped Voltage Drop	6 AWG	8 AWG	10 AWG	12 AWG
0.25V	55 FT	35 FT	22 FT	14 FT
0.50V	110 FT	70 FT	44 FT	28 FT
0.75V	165 FT	105 FT	66 FT	42 FT
1.00V	220 FT	140 FT	88 FT	56 FT

Floor Plan Data, 1665 DMXtend

DMXTEND BAY FRAME LAYOUT



TYPICAL TOP VIEW OF CENTRAL OFFICE
DMXTEND 23" NETWORK BAY FRAMES
SEE ENG. NOTE 3



TYPICAL DMXTEND
IN A CENTRAL OFFICE
23" NETWORK BAY FRAME
SEE ENG. NOTE 3

TOP VIEW

Figure 1 - Isometric View

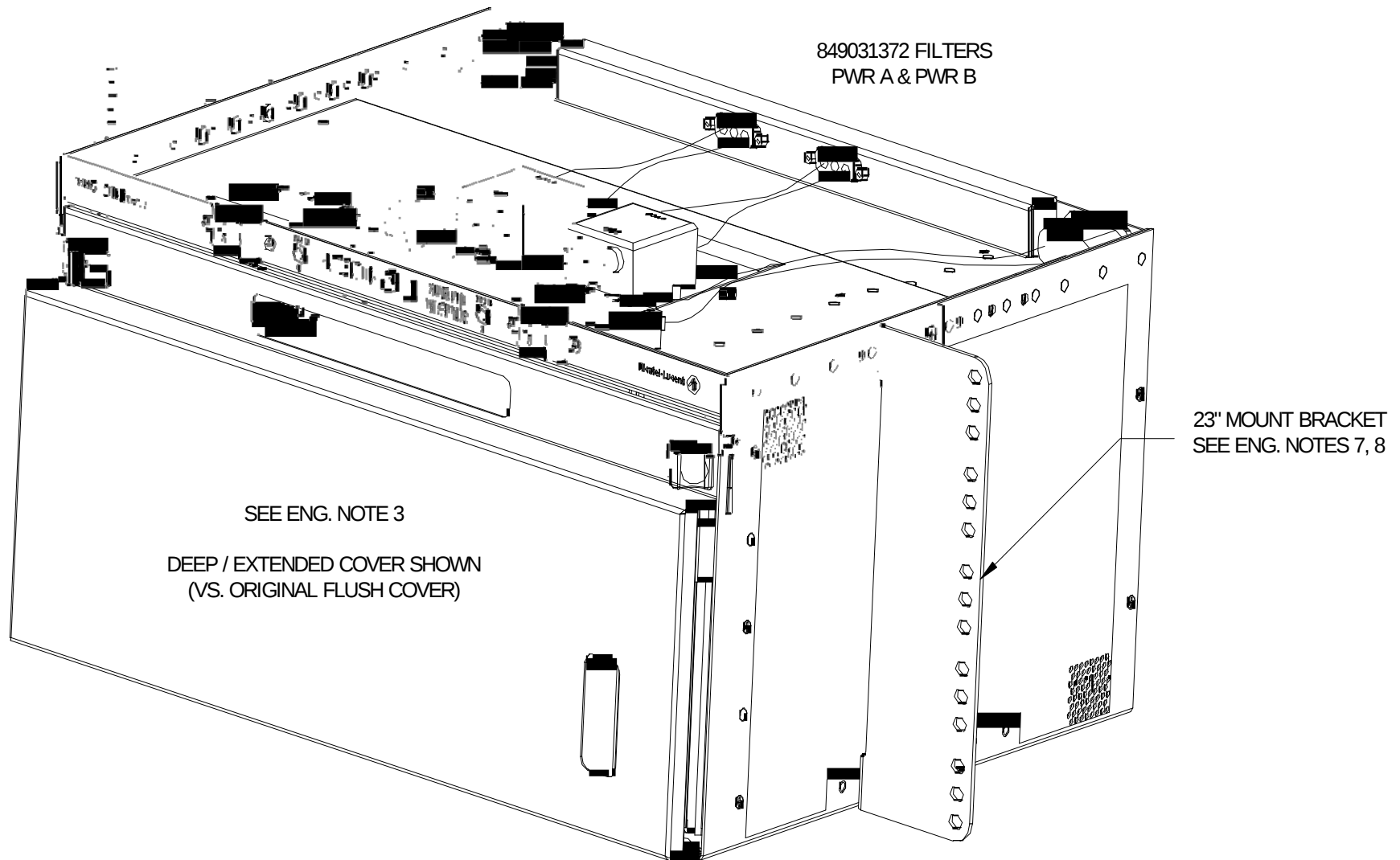


Figure 2 - Front View Circuit Pack Slots

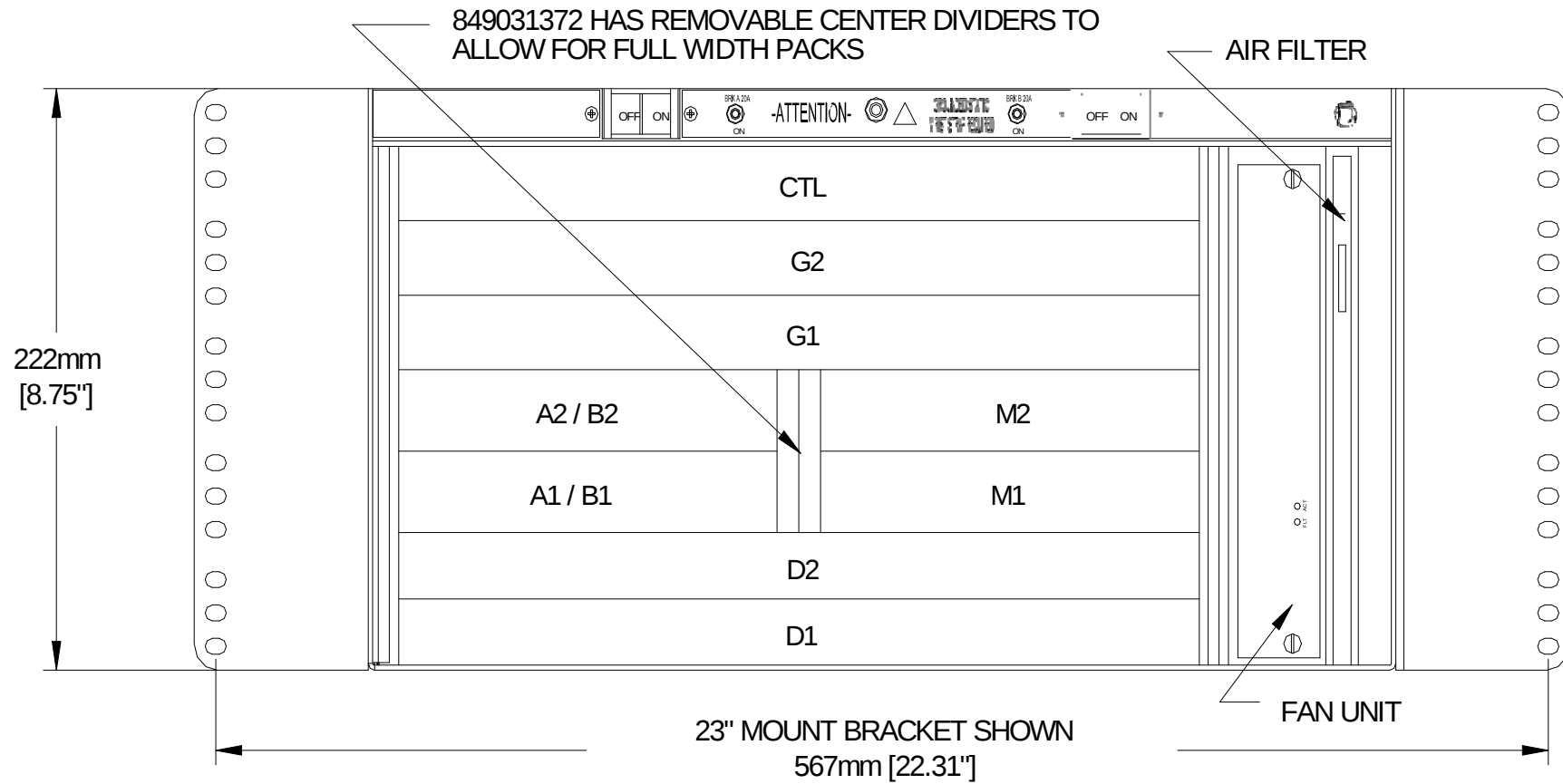


Figure 3 - Top View

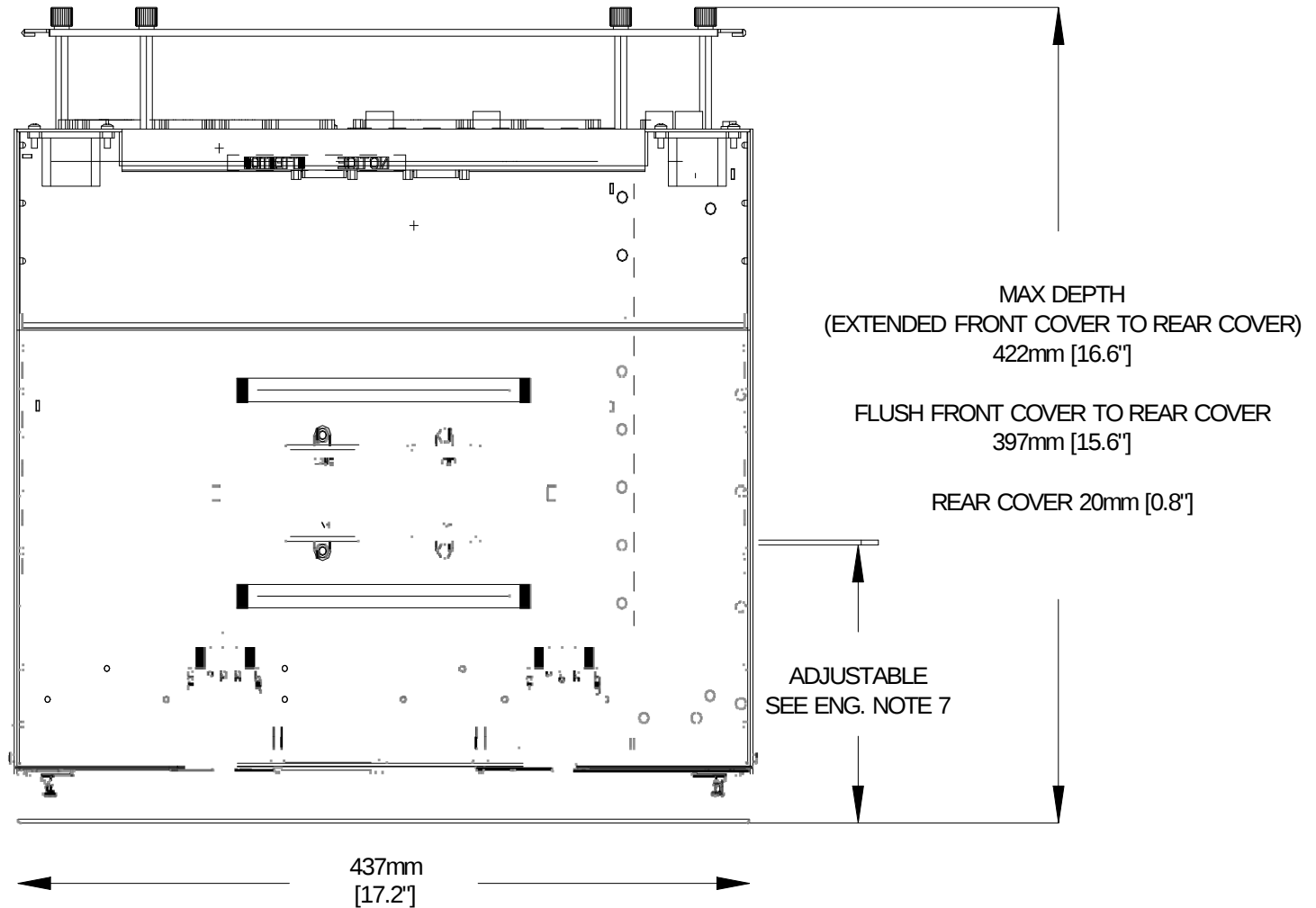


Figure 4 - Rear View Cable Connections

