



## Complementary Solutions

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### Power Distribution Products

ADC KRONE's PowerWorx® power distribution products have been engineered from the ground up to properly protect and distribute power to valuable, revenue-generating network equipment. Flexible PowerWorx configurations suit almost every network application and the platform sets a new standard for delivering power and protection.

#### Features

- Compliant with all major standards, including UL, NEBS Level 3, Telcordia (BellCore), NEC 2002, CSA, IEC, and CE
- Backed by ADC KRONE quality, manufacturing excellence and exceptional customer service
- Flexible platform for use in central offices, head ends, hubs, remote sites, etc.



### Digital Signal Cross-Connect Products

ADC KRONE is the world's leading supplier of Digital Signal Cross-connect (DSX) solutions. By working closely with our customers and paying close attention to industry trends, we have anticipated changing needs and met the challenges of today's highly competitive environment with our innovative copper products. With the widest portfolio of digital signal cross-connect solutions, ADC KRONE offers its customers the best solutions for their networks, addressing the need for flexible network management for both large and small applications.

#### Features

- Ideal for applications where cross-connecting, patching, testing or monitoring is required between network elements
- Configurations for high and low density, front or rear cross-connections, twisted pair applications or coaxial, T1/E1 or T3/E3 signal rates



# Complementary Solutions

## Other Infrastructure Solutions

### Outside Plant (OSP) Cabinets for Campus Applications

ADC KRONE OSP systems provide fully protected, environmentally secure systems for the management and administration of OSP fibre optic cables and splitters. All OSP enclosures feature ADC KRONE's industry-leading fibre cable management products, ensuring optimum network performance.

#### Features

- Lower life-cycle costs
- Maximum fibre provisioning
- Improved service levels
- Easy test access



### Megabit Modem 702G2

ADC KRONE's G.SHDSL MM702G2 provides an affordable, high performance 4.6Mbps connection over copper to support LAN-to-LAN or LAN-to-WAN solutions. The new 4-wire modem increases reach by up to 30 percent.

#### Features

- Supports 2-wire G.SHDSL speeds up to 2.3Mbps or 4-wire speeds up to 4.6Mbps (1-pair/2-pair copper)
- Enables easy web-based management program using standard web browsers
- Supports both point-to-point and DSLAM operation
- Built-in SNMP for remote or local management
- Supports 8 simultaneous PPP or bridge/routing sessions allowing multiple concurrent connections to the same or different service providers with ATM QoS
- 10/100 BT Ethernet port with MDI/MDI-X switch next to Ethernet port to connect directly to a PC with a straight-through cable, eliminating the need for crossover cable

### Sound and Video Solutions for Auditoriums and Surveillance Applications

ADC KRONE designs, engineers and manufactures a wide array of audio, video and data patching products. From durable patchbays to precision jacks and connectors, consistent quality is the hallmark of all our products.

#### Features

- UniPatch® modular patching system supports data, audio and video patching in one patch panel
- Pro Patch™ Programmable patching system combines WECCO-compliant bantam jacks with a precision DIP switch
- IEEE 1394a FireWire® patch panel accommodates 24 ports in one rack unit and mounts in standard 19-inch racks, allowing interconnection of cameras, servers, workstations and non-linear editing suites via FireWire at 400Mbps



### Data Management and Access Products

ADC KRONE's PatchMate® and PatchSwitch™ data management and access products provide a convenient, organised method of digital communications line monitoring and reconfiguration.

#### Features

- Built-in circuit diagnostic aids
  - Quick isolation of circuit problems
  - Rapid restoration of critical circuit paths
  - Routine "at-a-glance" visibility of basic net work health and activity (without instruments)
- Rugged, fail-safe design
  - High quality and innovative design assures absolute integrity of circuit
  - No sliding, hinged or rotating mechanical parts



# Complementary Solutions Voice Solutions



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### Category 3 Plenum Cable

#### Common Applications

- POTS
- T1 and T1 Fractional
- ISDN Basic and Primary Rate
- 4/16Mbps Token Ring (IEEE 802.5)
- 10Base-t (IEEE 802.3)
- 52Mbps ATM (ATM Forum)
- 100Base-T4 (Fast Ethernet)
- 100VG-AnyLAN (IEEE 802.12)

#### Compliances

- UL Subject 444
- (UL)-C(UL) Type CMP
- ICEA S-90-661
- NEC 800 Type CMP
- Two- to four-pair: TIA/EIA-568-B.2  
Category 3 horizontal cable
- Over four-pair: TIA/EIA-568-B.2  
Category 3 backbone cable



#### Ordering Information

Description	Packaging	Catalogue Number*
<b>Category 3 Plenum Cable</b> Jacket colour: white		
2-pair	Reel – 305m (1000')	VXV0224-19R2
3-pair	Reel – 305m (1000')	VXV0324-19R2
4-pair	Reel – 305m (1000')	VXV0424-19R2
6-pair	Reel – 305m (1000')	VXV0624-19R2
2-pair	Spool	VXV0224-19XX
3-pair	Spool	VXV0324-19XX
4-pair	Spool	VXV0424-19XX
6-pair	Reel	VXV0624-19XX
8-pair	Reel	VXV0824-19XX
12-pair	Reel	VXV1224-19XX
25-pair	Reel	VXV2524-19XX
50-pair	Reel	VXV5024-19XX
75-pair	Reel	VXV7524-19XX
100-pair	Reel	VXV0024-19XX
200-pair	Reel	VXCC24-19XX
300-pair	Reel	VXC3X24-19XX

\*To designate reel length, replace XX with:

- 02 = 305 metres (1000')
- 04 = 609 metres (2000')
- 05 = 762 metres (2500')
- 06 = 914 metres (3000')
- 10 = 1524 metres (5000')
- 12 = 1828 metres (6000')

### Category 3 Plenum Cable

#### Specifications

##### Electrical Characteristics

Conductor DC resistance (maximum):	28.6Ω/1000 feet (9.38Ω/100 metres) @20°C
DC resistance unbalance (maximum):	5%
Insulation resistance (minimum):	500 Megohms/1000 feet @20°C
Mutual capacitance (typical):	19 pF/foot (5.6nF/100 metres)
	20 pF/foot (5.6nF/100 metres)
Operating temperature (maximum):	60°C
Operating voltage (maximum):	300VDC

Frequency (MHz)	Impedance (Ohms)	Attenuation Max (dB/100m)	NEXT Min (dB)	SRL (return loss) Min (dB)
1.0	85-115	2.6	41	12
4.0	85-115	5.6	32	12
8.0	85-115	8.5	27	12
10.0	85-115	9.7	26	12
16.0	85-115	13.1	23	10

Notes: (1) Compliance testing for the above parameters is based on Swept Frequency Measurements.

(2) NEXT = Near-End Crosstalk. NEXT requirements for cables up to and including 4 pair are for Worst-Case-Pair NEXT. Cables over 4 pair are subject to PowerSum NEXT requirements.

##### Construction

Conductors:	24 AWG solid bare copper
Insulation:	LS-flame retardant PVC
Pairing:	Short, staggered pair lays
Colour-coding:	See Technical Reference Section, 25-pair colour-code table
Rip cord:	Applied under jacket
Jacket:	LS-flame retardant PVC (2- to 100-pair) PVDF Copolymer (Over 100-pair)

### Category 3 Riser Cable

#### Common Applications

- POTS
- T1 and T1 Fractional
- ISDN Basic and Primary Rate
- 4/16Mbps Token Ring (IEEE 802.5)
- 10Base-T (IEEE 802.3)
- 52Mbps ATM (ATM Forum)
- 100Base-T4 (Fast Ethernet)
- 100VG-AnyLAN (IEEE 802.12)

#### Compliances

- UL Subject 444
- (UL)-C(UL) Type CMR/CMG
- ICEA S-90-661
- NEC 800 Type CMR
- Two- to four-pair: TIA/EIA-568-B.2  
Category 3 horizontal cable
- Over four-pair: TIA/EIA-568-B.2  
Category 3 backbone cable



#### Ordering Information

Description	Packaging	Catalogue Number*
<b>Category 3 Riser Cable</b> Jacket colour: white		
2-pair	Reel – 305m (1000')	D0224D0-GYR2
3-pair	Reel – 305m (1000')	D0324D0-GYR2
4-pair	Reel – 305m (1000')	D0424D0-GYR2
6-pair	Reel – 305m (1000')	D0624D0-GYR2
2-pair	Spool	D0224D0-GYXX
3-pair	Spool	D0324D0-GYXX
4-pair	Spool	D0424D0-GYXX
6-pair	Reel	D0624D0-GYXX
8-pair	Reel	D0824D0-GYXX
12-pair	Reel	D1224D0-GYXX
25-pair	Reel	D2524D0-GYXX
50-pair	Reel	D5024D0-GYXX
100-pair	Reel	D0024D0-GYXX
200-pair	Reel	DCC24D0-GYXX
300-pair	Reel	D3X24D0-GYXX
400-pair	Reel	D4X24D0-GYXX

\*To designate reel length, replace XX with:

- 02 = 305 metres (1000')
- 04 = 609 metres (2000')
- 05 = 762 metres (2500')
- 06 = 914 metres (3000')
- 10 = 1524 metres (5000')
- 12 = 1828 metres (6000')

### Category 3 Riser Cable

#### Specifications

##### Electrical Characteristics

Conductor DC resistance (maximum):	28.6Ω/1000 feet (9.38Ω/100 metres) @20°C
DC resistance unbalance (maximum):	5%
Insulation resistance (minimum):	500 Megohms/1000 feet @20°C
Mutual capacitance (typical):	19 pF/foot (5.6nF/100 metres)
	20 pF/foot (5.6nF/100 metres)
Operating temperature (maximum):	60°C
Operating voltage (maximum):	300VDC

Frequency (MHz)	Impedance (Ohms)	Attenuation Max (dB/100m)	NEXT Min (dB)	SRL (return loss) Min (dB)
1.0	85-115	2.6	41	12
4.0	85-115	5.6	32	12
8.0	85-115	8.5	27	12
10.0	85-115	9.7	26	12
16.0	85-115	13.1	23	10

Notes: (1) Compliance testing for the above parameters is based on Swept Frequency Measurements.

(2) NEXT = Near-End Crosstalk. NEXT requirements for cables up to and including 4 pair are for Worst-Case-Pair NEXT. Cables over 4 pair are subject to PowerSum NEXT requirements.

##### Construction

Conductors:	24 AWG solid bare copper
Insulation:	Lead-free, flame retardant PVC
Pairing:	Staggered pair lays
Colour-coding:	Standard telephony (See Technical Reference Section, 25-pair colour-code table)
Rip cord:	Applied under jacket
Jacket:	Lead-free, flame retardant PVC

### Backmount Frames

Backmount frames in a variety of sizes, suitable for LSA-PLUS® Series 2 Modules.

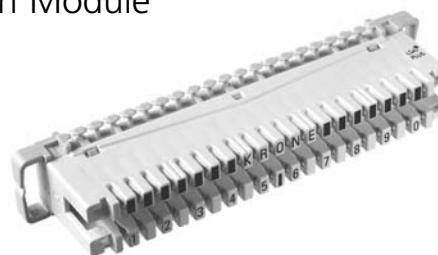


#### Ordering Information

Description	Quantity	Catalogue Number
11mm Deep, 1 Module	1	6424 3 005-01
11mm Deep, 2 Modules	1	6424 3 005-02
11mm Deep, 7 Modules	1	6424 3 005-07
30mm Deep, 10 Modules	1	6424 3 007-10
50mm Deep, 30 Modules	1	6424 3 009-30
60mm Deep, 34 Modules	1	6424 3 010-34

### LSA-PLUS® Backmount Disconnection Module

10 pair LSA-PLUS® modules which contain two piece contacts normally closed. Has advantage of individual pair disconnection and four wire test access.



#### Ordering Information

Description	Catalogue Number
LSA-PLUS® Backmount Disconnection Module, White, Pack of 10	6089 1 102-02
LSA-PLUS® Backmount Disconnection Module, Cream, Pack of 10	6089 1 810-00

# Complementary Solutions

## Voice Solutions

### 10 Pair Label Holder and Labels

Easy identification of terminations and groups of modules. Label holders are available for mounting on 10 pair LSA-PLUS® modules and for mounting directly onto the backmount frame. Labels can be ordered separately.



#### Ordering Information

Description	Quantity	Catalogue Number
Double Sided Hinged Label Holder Grey	Pack of 10	6092 1 810-00
Label Holder Complete with Label, fits on one position on backmount frame	Pack of 10 Strips	6092 1 820-00
Blank white labels for use with label holders 6092 1 810-00 & 6092 1 840-00	Pack of 100	6534 1 001-00

### Connection Cord

Equipped with a plug at each end of the cord. Primarily used for interconnecting separate circuits either on the same or between different LSA-PLUS® modules.



#### Ordering Information

Description	Quantity	Catalogue Number
2 Pole. For use with LSA-PLUS® connection and disconnection modules, cord length 1.5m	Pack of 10	6529 1 022-01
4 Pole. For use with LSA-PLUS® switching and disconnection modules, cord length 1.5m	Pack of 10	6529 1 042-01

### ComProtect Series B

Compact plug-in single pair overvoltage protection for LSA-PLUS® series. ComProtect Series B protects from damage caused by overvoltage with a 3-pole GDT with failsafe (primary circuit) and transient secondary elements (Diodes) for quick responding fine protection. Additional overcurrent protection is realised with reversible thermistors (PTCs) that complete the 5 point protective circuitry. These devices are designed for use in exchanges and terminal equipment in both analogue and ISDN (<2Mbps) systems. All include earthing rail.



#### Ordering Information

Description	Quantity	Catalogue Number
CP BI12A1 – 5 point and transient protection, max. operating voltage is 12V, GDT with failsafe	10	5909 1 084-00
CP BI24A1 – as above, max. operating voltage is 24V	10	5909 1 083-00
CP BI70A1 – as above, max. operating voltage is 70V	10	5909 1 082-00
CP BI180A1 – as above, max. operating voltage is 180V	10	5909 1 076-00
CP BOD180A2 – high GDT clamping voltage (>250V)	10	5909 1 078-10

### TrueNet® Connection Box 201D

Low profile plastic box accommodates up to 20 pairs or 2 LSA-PLUS® modules.

#### Dimensions

170(H) x 120(W) x 43(D)mm



#### Ordering Information

Description	Catalogue Number
Connection Box 201D, 20 Pair	6429 1 076-00
Connection Box 201D, 10 Pair	6429 1 078-00

# Complementary Solutions

## Voice Solutions

### TrueNet® Connection Box 301A

Plastic modular box, for 100 pairs designed to accommodate 10 LSA-PLUS® 10 pair modules.

#### Dimensions

320(H) x 210(W) x 120(D)mm



#### Ordering Information

Description	Catalogue Number
Connection Box 301A Includes 1 backmount frame 5/30/10A equivalent and earthing	6530 1 017-00

### Distribution Frame 108A

Modular frame for 1380 pairs using LSA-PLUS® modules. May be mounted back to back, side by side, wall mounted or free standing. Complete with detachable legs.



#### Ordering Information

Description	Dimensions	Weight	Catalogue Number
Distribution frame 108A	2004(H)*x560(W)x150(D)	29kg	6420 1 013-00

\*Height measurement includes fitted legs

### PROFIL® Frame 95/46

For installation in already set-up distribution frames and distribution cabinets.

The frame consists of:  
 2 PROFIL rods, 12mm in diameter (stainless steel)  
 An adequate number of PROFIL holders with a depth of 46mm

Completely assembled PROFIL frame:  
 PROFIL frame 95 for accommodation of LSA  
 PROFIL modules 2/10, 2/8-95, LSA-PROFIL NT  
 10 pairs and HighBand®



#### Ordering Information

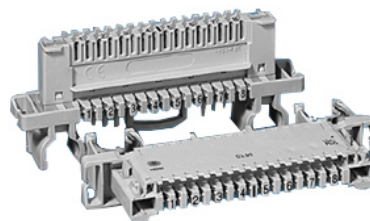
Description	Catalogue Number
PROFIL Frame 95/46, length of rods 299mm	6577 2 812-01
PROFIL Frame 95/46, length of rods 574mm	6577 2 812-02
PROFIL Frame 95/46, length of rods 861mm	6577 2 812-03
PROFIL Frame 95/46, length of rods 1136mm	6577 2 812-04
PROFIL Frame 95/46, length of rods 1423mm	6577 2 812-05
PROFIL Frame 95/46, length of rods 1698mm	6577 2 812-06

### LSA-PLUS® PROFIL® NT Disconnection Module

Disconnection module for 10 pairs, with right-angled arrangement of the contact rows for distributor systems ensuring enhanced access security. The mounting pitch is only 17.5mm. For installation in PROFIL rack systems with rod spacing 95mm for 10 pairs.

Small jumper guides left and right with built-in earth contact clips.

Housing colour: cream white



#### Ordering Information

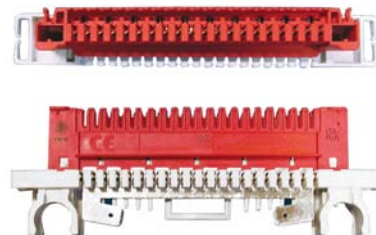
Description	Catalogue Number
LSA-PLUS PROFIL NT Disconnection Module, 10 Pairs	7014 1 601-00

### LSA-PLUS® PROFIL® NT Earth Module

For connecting drain wires to an earth contact without soldering, wire-stripping or the use of screws.

Designed for universal use with:  
Up to 20 drain wires  
For clicking onto PROFIL frames

Housing colour: red



#### Ordering Information

Description	Catalogue Number
LSA-PLUS PROFIL NT Earth Module	7014 2 152-00

### PROFIL® Module Label Holder

Designed for universal use with backmount frame and PROFIL rod systems. For vertical identification

Label size: 95 x 18 mm for 2/10

Requires the space of one connection module in the backmount frame / PROFIL rod system.



#### Ordering Information

Description	Catalogue Number
PROFIL Module Label Holder	6753 2 009-00

### LSA-PLUS® NT Hinged Label Holder

Hinged label holder for LSA-PLUS NT. Can be inserted directly onto LSA-PLUS NT/PROFIL NT modules for 10 pairs. Comes with paper label and transparent cover. The flammability class of the grey label holder is UL94 V-0



#### Ordering Information

Description	Catalogue Number
Hinged Label Holder	7014 2 007-00

### UniVK Mini-distributor for Indoor Applications

These mini-distributors are space-saving solutions for small and medium-sized data and telecommunication networks based on either copper or fibre technology.

The boxes come in various dimensions and are designed for wall mounting in dry, indoor areas.

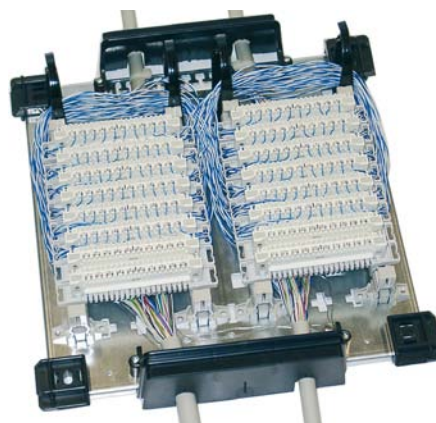
Different mounting systems fixed to the base plate allow the installation of LSA PROFIL®, LSA-PLUS® or LSA PROFIL® NT modules (as a partial or mixed installation).

The UniVK distribution boxes are designed for the installation of the following connection and distribution components:

- LSA PROFIL®/LSA PROFIL® NT Series 2 modules (eight or ten pair; fixing width: 95mm)
- LSA-PLUS® Series 2 modules (eight or ten pair; fixing width: 95mm)

#### Features

- Boxes can be outfitted with overvoltage protection up to a maximum height of 33mm above the modules
- Protection against unauthorised access is achieved by a swivel handle and security lock. The swivel handle is installed in the cover in place of the plastic label



UniClip on the base-plate of the UniVK



### UniVK Mini-distributor for Indoor Applications

Ordering Information			
Description	Dimensions H x W x D (in mm)	Maximum Capacity	Catalogue Number
<b>Distribution Box UniVK 2</b> (modules ordered separately); for installation of: 6 LSA PROFIL® Series 2 modules 8 LSA-PLUS® NT modules 6 LSA-PLUS® Series 2 modules	320mm x 225mm x 86mm	60 pairs	7079 1 020-00
		80 pairs	7079 1 020-04
		60 pairs	7079 1 020-03
<b>Distribution Box UniVK 4</b> (modules ordered separately); for installation of: 12 LSA PROFIL® Series 2 modules 16 LSA-PLUS® NT modules 12 LSA-PLUS® Series 2 modules Fibre applications	320mm x 320mm x 86mm	120 pairs	7079 1 040-00
		160 pairs	7079 1 040-04
		120 pairs	7079 1 040-03
			7079 1 040-05
<b>Distribution Box UniVK 8</b> (modules ordered separately); for installation of: 30 LSA PROFIL® Series 2 modules 38 LSA-PLUS® NT modules 30 LSA-PLUS® Series 2 modules Fibre applications	535mm x 320mm x 86mm	300 pairs	7079 1 080-00
		380 pairs	7079 1 080-04
		300 pairs	7079 1 080-03
			7079 1 080-05
<b>Distribution Box UniVK 12</b> (modules ordered separately); for installation of: 45 LSA PROFIL® Series 2 modules 57 LSA-PLUS® NT modules 45 LSA-PLUS® Series 2 modules	535mm x 520mm x 86mm	450 pairs	7079 1 120-00
		570 pairs	7079 1 120-04
		450 pairs	7079 1 120-03
<b>Accessories</b>			
Swivel handle			7079 1 430-00
PROFIL half-cylinder, Code 19 (without keys)			7056 2 360-00
PROFIL half-cylinder, Code 15 (without keys)			7056 2 364-00
Key for lock, Code 19			5267 3 383-52
Key for lock, Code 15			5267 3 383-57
Kit for cover contact			7079 1 435-00
Earth kit for UniVK 2 and UniVK 4			7079 1 440-00
Earth kit for UniVK 8 and UniVK 12			7079 1 441-00
Earth terminals (Quantity: 10)			7079 1 442-00

#### Technical data

##### Base-plate

- Galvanised sheet metal
- Plastic corner pieces for wall mounting
- Holes for mounting UniClip and guide ring components
- Integrated cable supports at the top and bottom

##### Cover

- Sheet metal, powder-painted RAL 7035
- Plastic label with turnbuckle lock
- Swivel grip for PROFIL half-cylinder and cover contact

##### Cable entries

- Cable entries made of plastic at the top and bottom (pre-formed breakouts)
- Cable entries fixed to the base plate

##### Earth

- Earth clamp mounted on the base plate

##### Protection Class

- IP 40, satisfying DIN 40 050

### LSA-PLUS® NT Connection Cord, 1 Pair

Connection cord with 2 NT plugs. Thanks to the extended length, the plug can be easily gripped even when there are adjacent protection magazines. Designed for LSA-PLUS NT/LSA PROFIL NT disconnection and switching modules; 2-pole connection on the cable side (a to a and b to b).



#### Ordering Information

Description	Catalogue Number
LSA-PLUS NT connection cord, 1 pair 2m	7014 2 040-00

### NTP OD180A2

Recommended for protection of distribution and terminal equipment in analog, ISDN, HDSL and ADSL telecommunication systems. Designed for the partial or complete equipping of LSA-PLUS NT or LSA PROFIL NT disconnection or switching modules in conjunction with a 10-pair earth bar (Order No.: 7019 3 037-00). The protection circuit consists of a 3-pole overvoltage arrester, fail-safe contact, reversible overcurrent protection components and diodes for secondary overvoltage protection. The overcurrent protection functions as a reversible line fuse.



#### Ordering Information

Description	Catalogue Number
NTP OD180A2	7019 1 014-00

# Complementary Solutions

## Voice Solutions

### PROFIL® Distribution Frame 108P

The PROFIL Distribution Frame 108P offers a pre-assembled modular solution that enables universal installation of copper, coaxial and fibre optic applications. When used in conjunction with the additional jumper frame a high jumpering volume can be achieved.

#### Features

- Distribution frame with two vertical bays for accommodation of components with a fixing dimension of 95 mm
- System and line side components can be installed within a single bay, this allows jumpering within the bay
- High jumpering volume thanks to a sufficient number of pre-mounted vertical and horizontal jumper guides
- Delivered fully assembled
- High connection density



Basic Frame 108P



Jumper Frame 108P

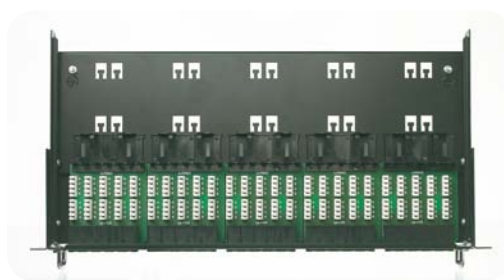
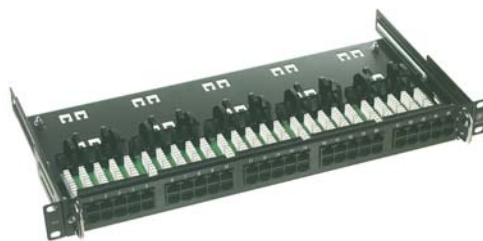
#### Ordering Information

Description	Catalogue Number
Basic Frame 108P	MDF-7081 1 007-01
Jumper Frame 108P	MDF-7081 1 007-10

### 1U Voice Patch Panel

The 1U Voice Patch Panel range from ADC KRONE comprises two versions for use with the multi-pair voice cables – the 25 port RJ45 version or the higher density 50 port RJ45 version.

These products are an ideal way to integrate PBX or other voice circuits into a standard structured cabling system.



#### Features

- Available in 25 and 50 port variants, both 1U 19"
- Designed specifically to integrate voice circuits into standard structured cabling systems
- Expansive cable management for maximum cable protection
- Innovative sliding panel mechanism for improved ease of installation
- 2 pair 258A voice wiring configuration

#### Ordering Information

Description	Catalogue Number
<b>Unshielded Patch Panels</b>	
25 Port Voice Panel	7022 4 001-25
50 Port Voice Panel	7022 4 001-50

For RJ-K converters (PABX master, full master and secondary) please refer to page 6.56

For 1U plastic ring jumper bars please refer to page 4.102