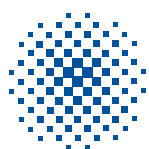
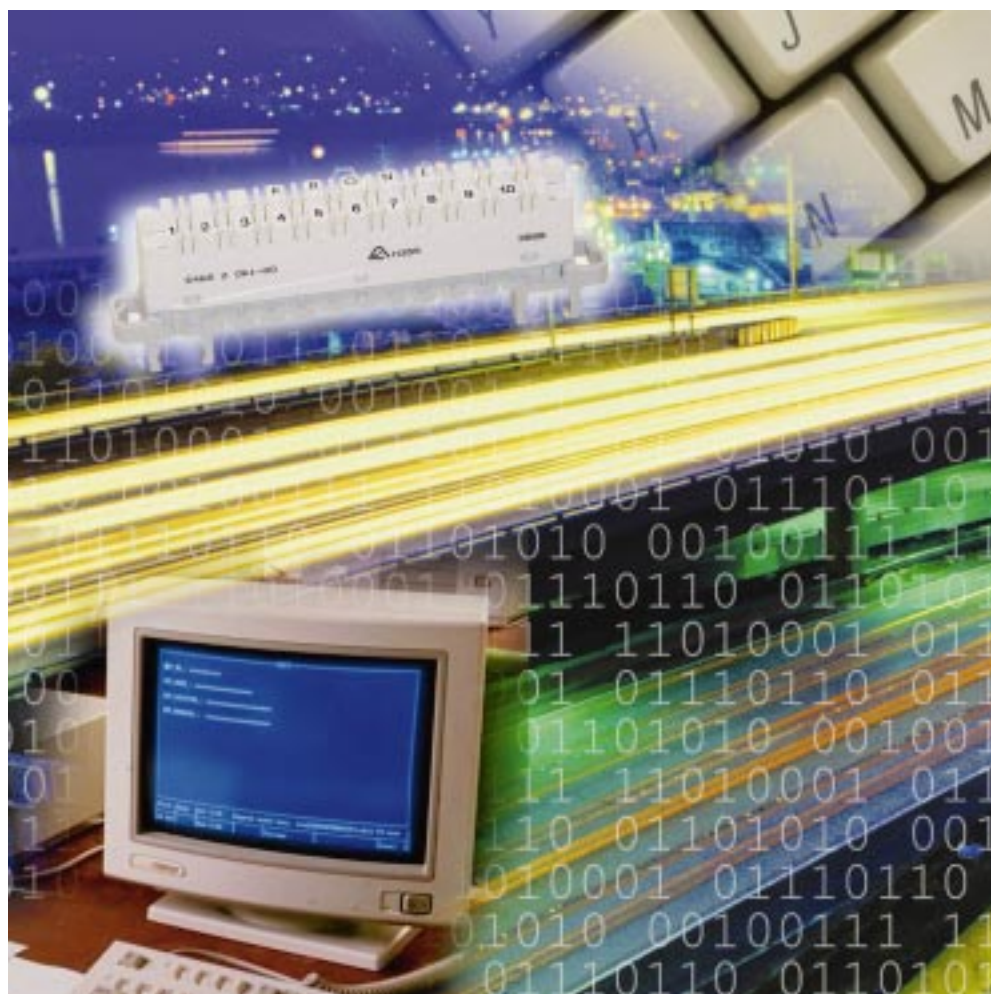


KRONE Highband for Broadband Delivery

Transporting tomorrow's technology...today



KRONE

AccessNET

HIGHBAND

THE NEXT GENERATION OF CONNECTIVITY

No matter which sector of the public access market you're in, KRONE AccessNET can provide a total connectivity solution tailored to meet the demands of your network.

KRONE works closely with national carriers, new market entrants and the leading telecommunications suppliers to lay the foundation for public access communications infrastructure on both copper and fibre optic cabling architectures. Enabling the delivery of both today's and tomorrow's bandwidth hungry services to the customer.

KRONE AccessNET is a modular package, offering services from consulting to components. Supply and installation.



The deregulation of global telecommunications, economic prosperity and business expansion, drive the demand for broadband communications infrastructure.

HIGHBAND allows you to deliver tomorrow's services to your customers today!

HIGHBAND

TYPICAL APPLICATIONS



Digital Distribution Frame application for high density 64 twisted pair circuits instead of co-axial cable. HIGHBAND Compact 8 modules are utilised.



POI Point of Interconnect. Application is the termination of various media including twisted pair on HIGHBAND 10. Small station DDF's 19" rackmount with HIGHBAND Compact 8. Fibre and coaxial termination on the one KRONE mounting frame.



Digital loop carrier applications utilising HIGHBAND 10 for customer distribution with over voltage and over current protection and HIGHBAND 20 for density. Also xDSL applications.



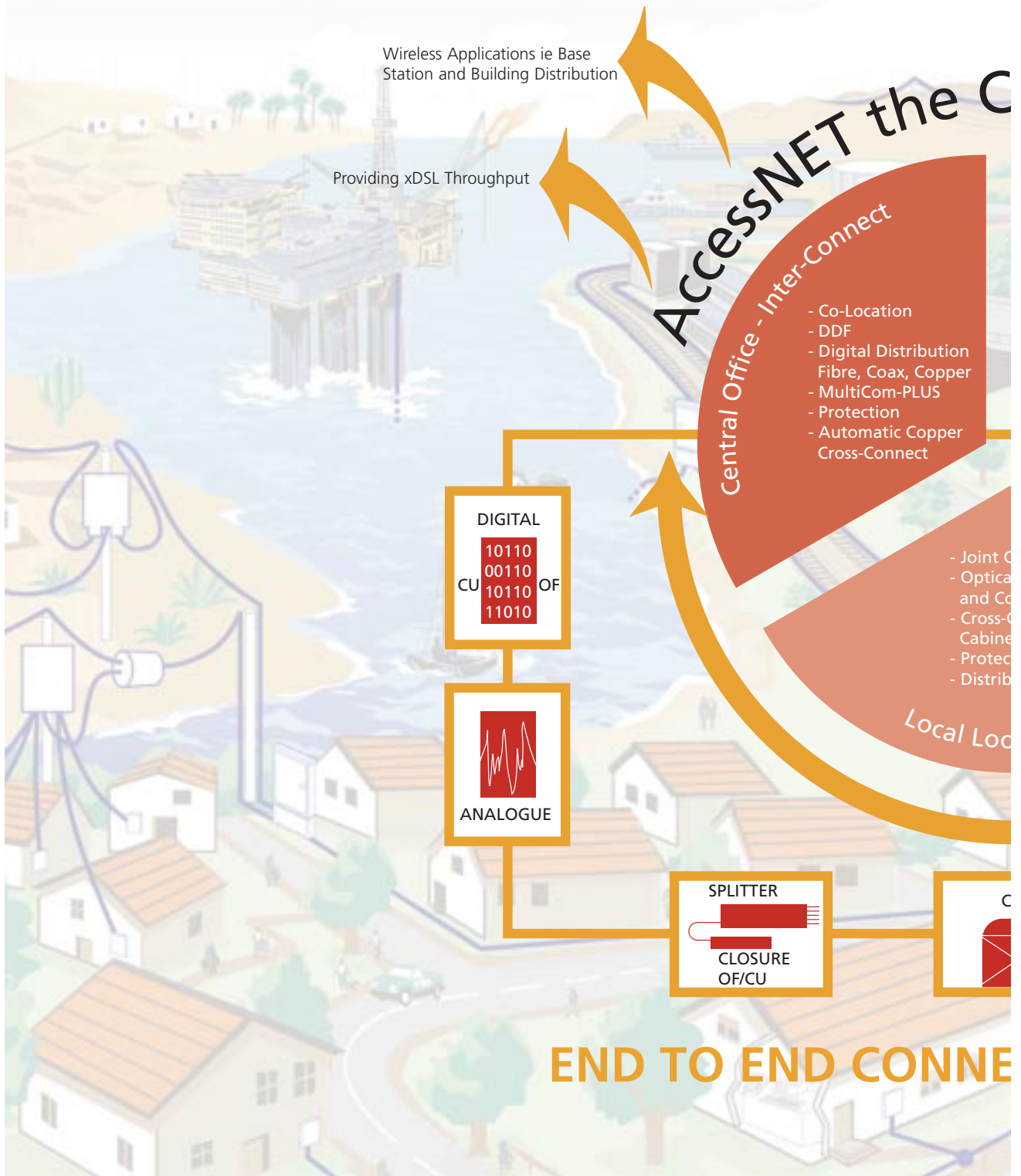
Building distribution utilising HIGHBAND 10 structured cabling ie. fibre to the building applications.

HIGHBAND

The Building Block for Broadband Networks

HIGHBAND

CONNECTIVITY SOLUTIONS CENTRAL OFFICE TO



CUSTOMER

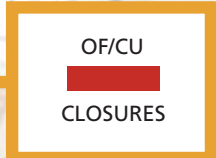
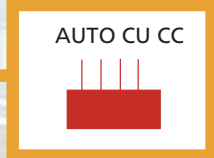
Complete Solution

Subscriber Interface - Network Boundary

- Distribution Boxes
- Building Distribution Frames
- Network Interfaces
- Protection
- Automatic Copper Cross-Connect

Closures
Splitters
Couplers
Connection
ets
tion
ution Boxes

op Delivery



Structured Premises Cabling

Platinum - Cat6* TrueNet. The world's only guaranteed zero bit error rate, cabling solution.

Gold - Cat6* Solution

Silver - Cat5e TrueNet Solution

Bronze - exceeds Cat5e Solution

KRONE at your Home

Intelligent cabling of residential premises, providing a complete multimedia and Internet enabled living experience.

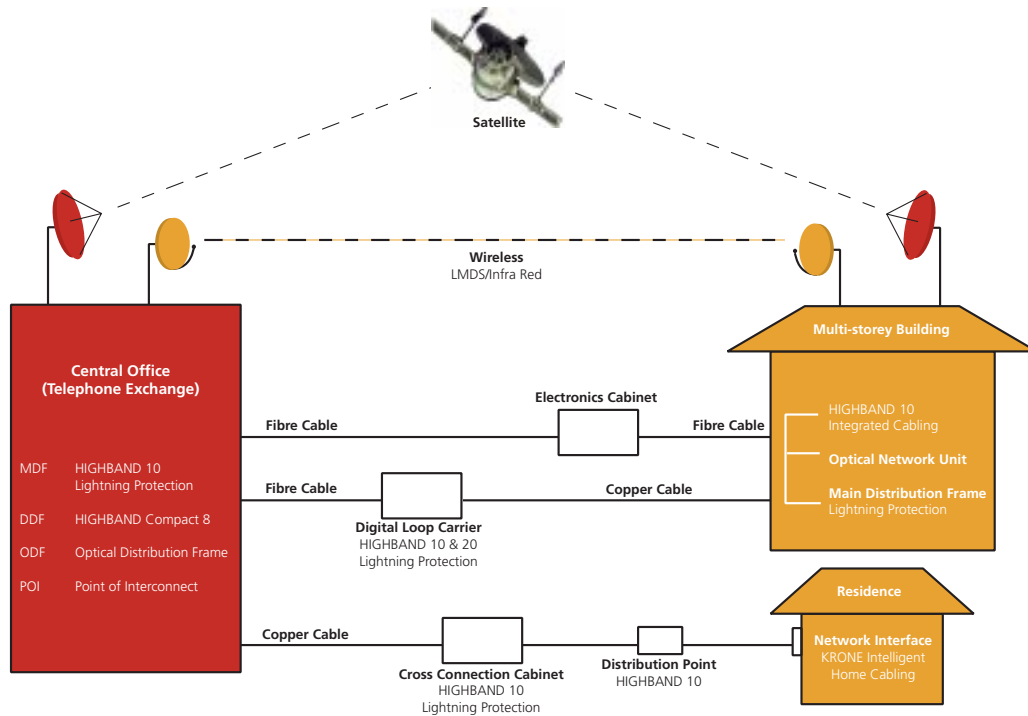
ACTIVITY SOLUTIONS

* Solutions & Products are based on proposed Category 6 channel standards under evaluation by the International Standards Organization and Telecommunications Industry Association.

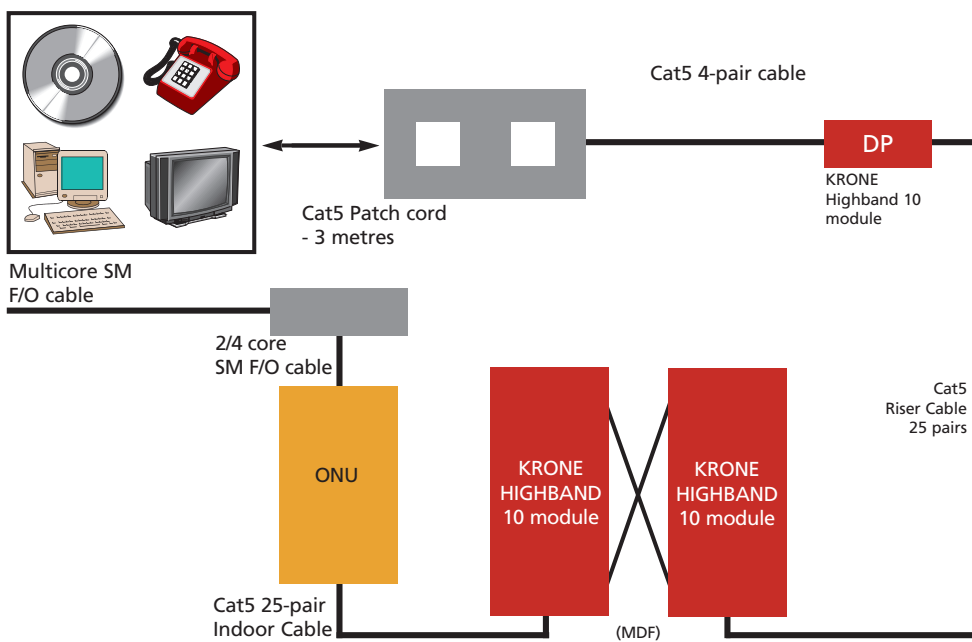
Typical Access Network

BROADBAND DELIVERY

MULTIMEDIA APPLICATIONS



1. BUILDING BACKBONE

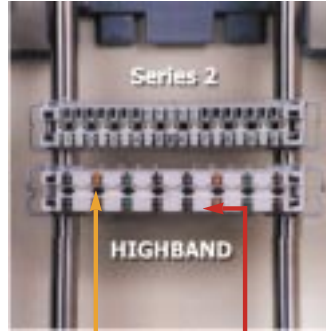


The HIGHBAND

DIFFERENCE



SERIES 2
"Supporting telecommunication networks throughout the world".



1. Individual pairs closer together
2. Adjacent pairs higher separation
3. Less metallic cross sectional area reducing capacitance



HIGHBAND
"The Next Generation of Connectivity" for Broadband Delivery.



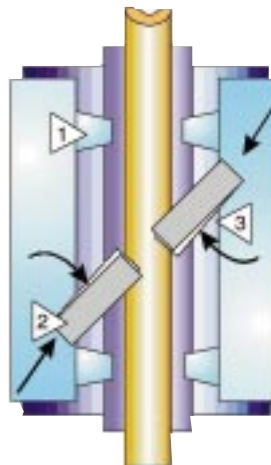
The Result The World's Highest Performing Contact

The Contact that the World's Telecommunication

NETWORKS ARE BUILT ON

1. Clamping ribs isolate contact area from stress on both sides of the connection.

2. Silver-plated contacts make a secure, gas-tight connection with **superior corrosion resistance**.



3. 45° "torsion" contact maintain a continual force on the connection.

Grips wire from two directions for greater security.

Resists wire being pulled out from top or bottom.

Never overstresses the contact (even with wire as large as 0.64mm).

HIGHBAND

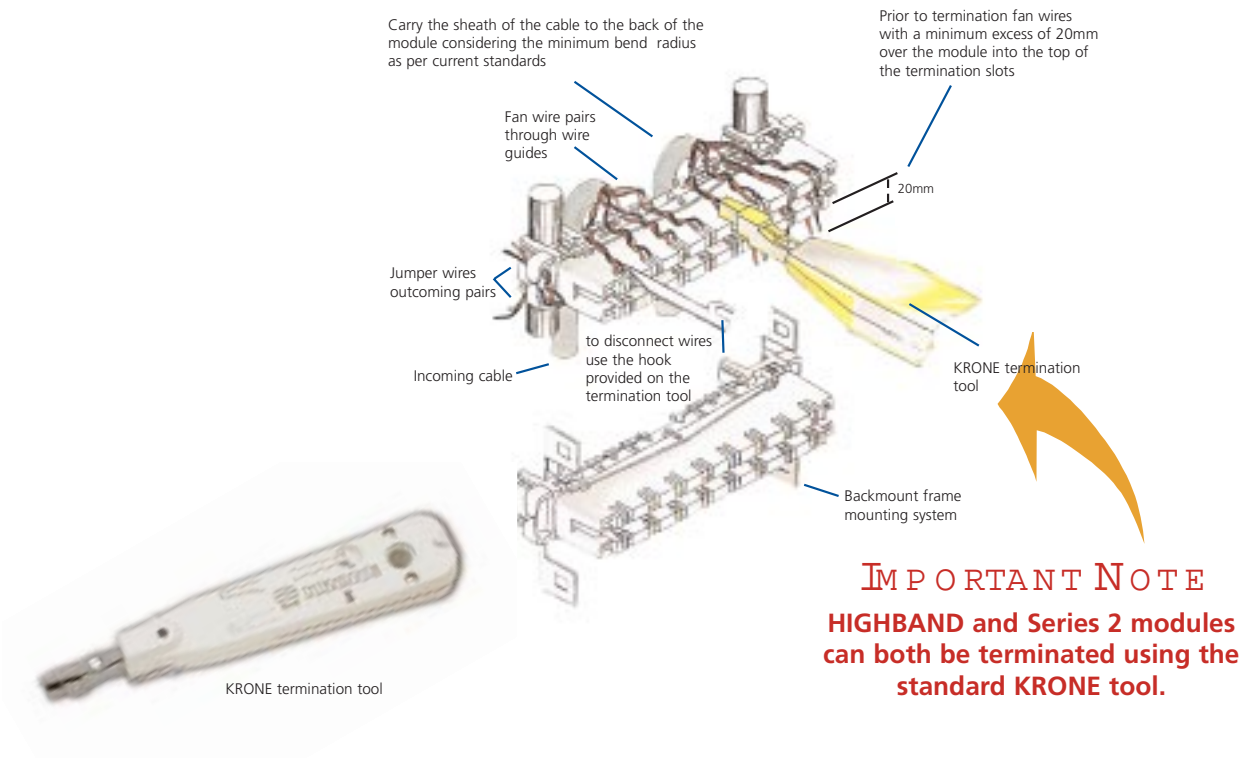
TECHNICAL SPECIFICATIONS

Operation Conditions

Environment for use:	Indoors in dry closed rooms
Operating temperature range:	110° to 60°C
Maximum relative humidity:	<93% non-condensing
Wire Range:	0.4 - 0.65 (26-22 AWG)
Wire Insulation diameter range (PE, PVC):	0.7 - 1.4
Number of wire reterminations:	>200
Wire insertion force (0.5 conductor diameter):	Typically 6N
Contact force of disconnection point:	.2N
NUmber of patching cycles:	>750
Transmission and reliability:	Exceeds requirements of ISO 11801 As 3080 and EIA 568A (exceeds the Cat6 Component Standard)
Average worst case near end cross talk performance for the following applications:	Hard wired (jumpered) -49 dB @ 100MHz Patched: -55 dB @ 100MHz

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INSTALLATION PROCEDURES



HIGHBAND

MODULES AND ACCESSORIES

10-Pair Highband Modules

Ideal for highspeed copper MDF's, CCC's, DP's and DSL delivery backbone cables. Pairs are labelled 1 though 10 on the front of the module, allows centre port test access and disconnect facility.

Product Number: 6468 2 061-00
Pack Qty: Box of 10



20-Pair Module

Ideal for highspeed copper backbone where highest density patching is required. Pairs are labelled 1 though 10 on bottom row with brown cross hatching on top row.

Product Number: 6468 2 081-00
Pack Qty: Box of 10



Highband Compact 8

Compact Enhanced Category 5 Module, Pairs numbered 1-8. Can be mounted on Profil and Backmount Frames for 8 incoming and 8 outgoing Pairs. As utilised in DDF applications (ie 8x8 pair modules producing a compact 64 services option).

Product Number: 6468 5 061-08
Pack Qty: Box of 10



Ultim8 Highband

Ultim8 exceeds the Cat6 component Standard when hard wired. This allows for patch by exception to be utilised and maintain Cat6 standards ensuring broadband capability to the customer

Product Number: 6468 5 060-06
Pack Qty: Box of 10



Identification Caps

Used to indicate specific services and circuits.

Product Number: 6462 2 101-00 Blue
6462 2 101-01 Red
6462 2 101-02 Green
6462 2 101-03 Yellow

Pack Qty: Bag of 20



Highband Dummy Plugs

To indicate specific services and circuits.

Product Number: 6951 5 035-00 Red
6951 5 035-01 Green

Pack Qty: Bag of 20



Label Holders

Provides a means of labelling a group of modules. Occupies one module position.

Product Number: 6092 2 012-02
6462 2 094-00
6092 2 012-02

Pack Qty: 1



Highband Disconnection Plugs

Plug for disconnecting a circuit.

Product Number: 6462 2 097-00 White
6462 2 097-10 Red
6462 2 097-20 Green

Pack Qty: Bag of 20



HIGHBAND

MODULES AND ACCESSORIES

HIGHBAND to Series 2 Adaptor

Used for testing HIGHBAND modules with a Series 2 Test Lead.

Product Number: 6451 2 178-04

Pack Qty: Bag of 2



Patch Cord, 1 to 2 Pair

For use on all HIGHBAND modules. Provides one pair patching on HIGHBAND 8 and 10 and two pair patching on HIGHBAND 16 and 20

Product Number: 6451 2 048-21 2M

6451 2 048-31 3M

6451 2 048-51 5M

Pack Qty: Bag of 2



HIGHBAND 1 Pair Voice Patch Cords

Used for patching between HIGHBAND modules and Series 2 modules. Provides one pair patching only.

Product Number: 6451 2 059-01 0.5m

6451 2 059-11 1.0m

6451 2 059-21 2.0m

6451 2 059-31 3.0m

6451 2 059-51 5.0m

Pack Quantity: 2



HIGHBAND 10, 2 Pair/2 Pair Patch Cord

Used for patching between Highband 10 modules. Provides 2 pair patching.

Product Number: 6451 2 103-10 1M

6451 2 103-20 2M

6451 2 103-30 3M

Pack Qty: Bag of 2



HIGHBAND 10, 2 Pair/RJ45 Patch Cord

Used for patching between Highband 10 modules and equipment with an RJ45 interface. Provides 2 pair patching.

Product Number: 6451 2 104-10 1M

6451 2 104-20 2M

6451 2 104-30 3M

Pack Qty: Bag of 2



HIGHBAND 10, 4 Pair to RJ45 Test Cord

Used for testing HIGHBAND 10 circuits.

Product Number: 6451 2 100-30 3M

Pack Qty: Bag of 1



Please contact KRONE for further information on the full range of Test/Patch cords for the HIGHBAND range.

HIGHBAND

PROTECTION

HIGHBAND 10 Arrestor Magazine Loaded 230V Profile

Overvoltage Protection, can be used in DLC applications and in Category 5 circuits and maintain performance.

Product Number: 6462 2 104-00

Pack Qty: Bag of 1



HIGHBAND 10 Arrestor Magazine Loaded 500V Profile

Overvoltage Protection, can be used in Category 5 circuits maintaining performance.

Product Number: 6462 2 105-00

Pack Qty: Bag of 1



HIGHBAND 10 Overvoltage Protector

Single Pair Overvoltage Protection for HIGHBAND Disconnecting and Switching Modules. Supplied with earth bar.

Product Number: 7042 1 002-00

Pack Qty: Set of 10 pcs



Protection

TECHNICAL DATA

Technical Data

Operating voltage (a/b-e).....	$V_{max,e}$	210.....	V
Nominal DC spark-over voltage.....	V_{sdcn}	210-310.....	V
Typical impulse spark-over voltage @ 1Kv/ μ s.....	V_0	320.....	V
Nominal Arrestor alt. Discharge current (a/b-4) ^{1>}	i_{daN}	2.5.....	A
Nominal Arrestor surge current (a/b-4) ^{1>}	i_{sN}	2.5.....	KA
Fail-Safe response time @ 1A _{nms}	t_1	<15.....	sec
Transverse delay time ^{1>}	t_d	<200.....	ns
Nominal current @ 20°C.....	I_N	125.....	mA
Typical resistance @ 20°C.....	R	10.....	Ohm
Series resistance balance.....	R_a	<1.5.....	Ohm
Typical capacitance (a/b-4, at 100kHz, $V_{ae} = .5V$).....	C	31.....	pF
Typical capacitance (a/b-4, at 100kHz, $V_{ae} = .40V$).....	C	19.....	pF
Leakage current @ 50V.....	I_L	<10.....	μ A
Max. attenuation loss (600kHz-8MHz, Z=120 Ohm).....	a	0.9.....	dB
Response time diodes.....	t	<1.....	ns

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