

## 4 Pair U/UTP Cable

### Application:

- Voice
- ISDN
- Fast Ethernet(IEEE802.3)
- 100Vg-AnyLAN(IEEE 802.12)
- Token Ring(IEEE 802.5)
- TP-PMD(ANSI X3T9.5)
- 100Base-T Ethernet(IEEE 802.3u)
- 155/622 Mbps ATM
- 1000Base-T
- 550 MHz Broadband video
- Power over Ethernet PoE / PoE+

### Industry Standard:

- UL, ETL Verified
- ANSI/TIA-568-C.2
- ISO/IEC 11801
- EN 50173


### Product Electrical Characteristics:

- Impedance:100±15 ohms
- Resistance Unbalance 100m: 5% max.
- Mutual Capacitance, max. nf/ 100m: 5.6
- DC Resistance, max. ohms/100m: 9.38
- Capacitance Unbalance: 160pf/ 100m max.

### Cable Data:

- No. of Pairs: 4
- Insulation Thickness: 0.195mm
- Nom.O.D.: 5.1mm
- Flame Rating: CM

P/N	Description	Jacket	Color	Std Pkg Qty
1101-03331	Conductor: 24AWG Bare Solid Copper Insulation: HDPE	PVC	Gray	305M/ Pull Box
1101-03339	Conductor: 24AWG Bare Solid Copper Insulation: HDPE	LSZH	Violet	305M/ Pull Box



→ Other colors are available upon request.

Frequency (MHz)	ASRL(db) Minimum	Attenuation Max. dB/100m	Attenuation Max. dB/1000ft	NEXT inimum dB/100m	Power Sum Minimum dB/100m
0.772	26	1.8	5.5	67	64
1	26	2.0	6.5	65	62
4	26	4.1	12.5	56	53
10	26	6.5	19.8	50	47
16	26	8.2	25	47	44
20	26	9.3	28.3	45	42
31.25	26	11.7	35.7	42	39
62.5	24	17.0	51.8	38	35
100	21	22.0	67.1	35	32
125	19	25	76.3	34	31

Fluke Test Report - Cat.5e UTP Cable run 100BASE-T over 100M



**Cable ID: 100M\_PER\_CAT5E\_1GB**

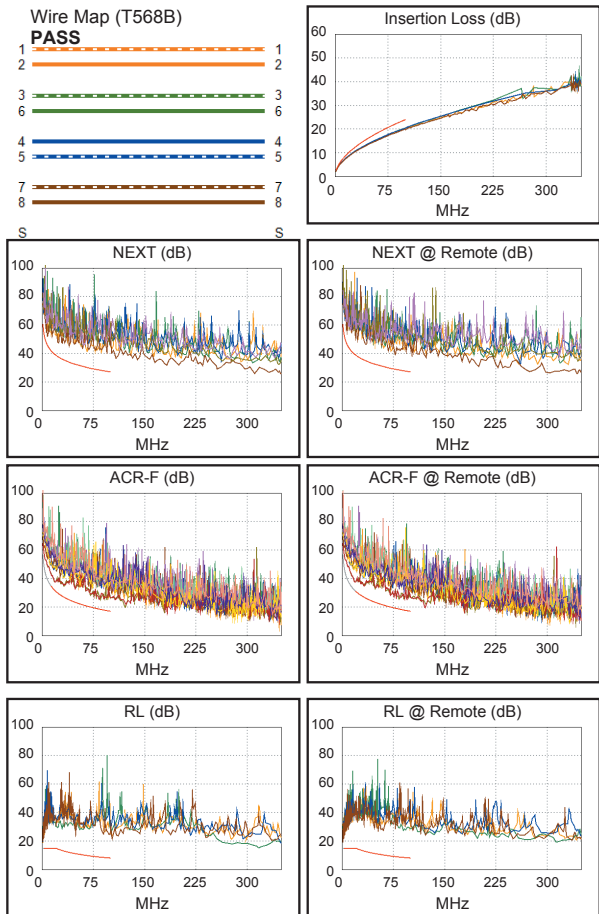
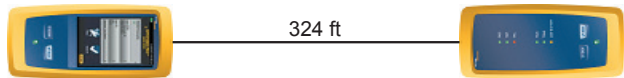
Date / Time: 03/03/2017 04:29:55 PM  
 Headroom 6.1 dB (NEXT 36-45)  
 Test Limit: 1000BASE-T  
 Cable Type: Cat 5e U/UTP  
 NVP: 69.0%

Operator: Jonas  
 Software Version: V5.0 Build 3  
 Limits Version: V5.0  
 Calibration Date:  
 Main (Module): 02/09/2015  
 Remote (Module): 02/09/2015

**Test Summary: PASS**

Model: DSX-5000  
 Main S/N: 2934390  
 Remote S/N: 2937480  
 Main Adapter: DSX-PLA004  
 Remote Adapter: DSX-PLA004

Length (ft), Limit 328	[Pair 78]	324
Prop. Delay (ns), Limit 570	[Pair 45]	488
Delay Skew (ns), Limit 50	[Pair 45]	10
Resistance (ohms), Limit 25.00	[Pair 45]	18.43
Impedance (ohms), Limit 85-115	[Pair 36]	97
Insertion Loss Margin (dB)	[Pair 36]	3.4
Frequency (MHz)	[Pair 36]	100.0
Limit (dB)	[Pair 36]	24.0



Worst Case Margin Worst Case Value

PASS	MAIN	SR	MAIN	SR
Worst Pair	36-45	36-45	36-45	36-45
NEXT (dB)	6.1	10.1	13.4	10.1
Freq. (MHz)	7.4	77.8	94.8	77.8
Limit (dB)	46.1	28.9	27.5	28.9

PASS	MAIN	SR	MAIN	SR
Worst Pair	36-45	36-45	36-45	45-36
ACR-F (dB)	5.8	5.8	7.8	7.7
Freq. (MHz)	18.0	18.5	95.0	94.8
Limit (dB)	31.9	31.7	17.4	17.5

Worst Pair	36	36	45	36
PS ACR-F (dB)	8.3	8.2	9.7	9.8
Freq. (MHz)	18.9	18.0	95.0	94.8
Limit (dB)	28.9	29.3	14.8	14.9

PASS	MAIN	SR	MAIN	SR
Worst Pair	45	12	78	12
RL (dB)	10.0	9.6	16.6	9.6
Freq. (MHz)	2.4	2.4	99.3	2.4
Limit (dB)	15.0	15.0	8.0	15.0

Compliant Network Standards:  
 10BASE-T 100BASE-TX 100BASE-T4  
 1000BASE-T ATM-25 ATM-51  
 ATM-155 100VG-AnyLan TR-4  
 TR-16 Active TR-16 Passive

LinkWare™ PC Version 9.7

## 4 Pair UTP and FTP Patch Cord

### Application:

- 10 Base-T (IEEE 802.3)
- Fast Ethernet (IEEE 802.3u)
- 100Vg-AnyLAN (IEEE 802-12)
- Token Ring (IEEE 802.5)
- TP-PMD (ANSI X 3T9.5)
- 100 Mbps CDDI
- ATM 155
- Gigabit 1000 Mbps (802.3z)

### Product Description:

- Conductor: 24AWG Stranded Copper
- Insulation:HDPE
- Jacket: FRPVC
- 50 u" Gold Plated on the Plug Contacts
- Wiring:T568B
- Colored Patch Cables with Molded Boots
- Color: Red, Orange, Yellow, Green, Blue, Gray

### Industry Standard:

- ETL Verified
- ANSI/TIA-568-C.2
- ISO/IEC 11801
- EN 50173



Prevent from broken on spring leaf of plug



Stackable design for high density modular jack

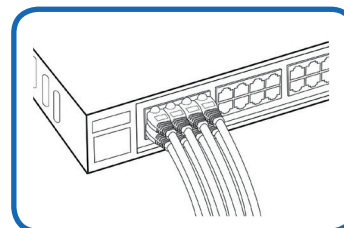
P/N	Description	Length(M)	Color	Std Ctn Qty
1201-03352	Cat.5e 4 Pair UTP Patch Cord	2	Red	150
1201-03354		2	Orange	150
1201-03351		2	Yellow	150
1201-03353		2	Green	150
1201-03350		2	Blue	150
1201-03349		2	Gray	150
1201-03356	Cat.5e 4 Pair UTP Patch Cord	3	Red	100
1201-03358		3	Orange	100
1201-03355		3	Yellow	100
1201-03357		3	Green	100
1201-03343		3	Blue	100
1201-03342		3	Gray	100
1201-03361	Cat.5e 4 Pair UTP Patch Cord	5	Red	70
1201-03363		5	Orange	70
1201-03360		5	Yellow	70
1201-03362		5	Green	70
1201-03359		5	Blue	70
1201-03344		5	Gray	70
1201-03035	Cat.5e 4 Pair FTP Patch Cord	2	Gray	150
1201-03074		3	Gray	100
1201-03036		5	Gray	70



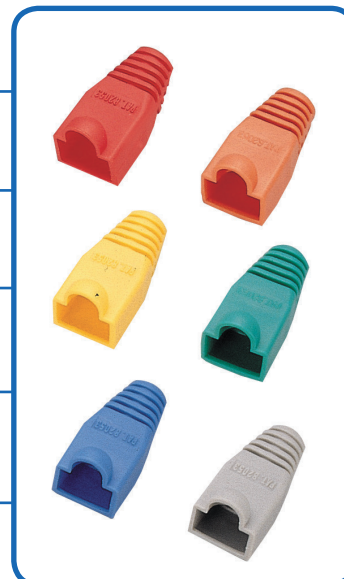
→ Please contact us for any customized requirements.

## Color-Coded Boots

- Maintains proper bend radius, especially on stranded cable.
- Simplify cable management and trouble shooting
- Stackable design for neat and high density modular jacks in Hub.
- Color: Red, Orange, Yellow, Green, Blue, Gray, Black, White



P/N	Description	Std Pkg Qty	Std Ctn Qty
1601-02003	Red color-coded boots (6Φ)	800	4800
1601-03003	Orange color-coded boots (6Φ)	800	4800
1601-04003	Yellow color-coded boots (6Φ)	800	4800
1601-05003	Green color-coded boots (6Φ)	800	4800
1601-06004	Blue color-coded boots (6Φ)	800	4800
1601-08005	Gray color-coded boots (6Φ)	800	4800



## RJ-45 Plugs

### Specification:

#### Material and Finish

- Housing: Polycarbonate
- Contact: Copper alloy 50u" gold over nickel

#### Mechanical

- Cable-to-Plug tensile Round & flat cable available
- Strength: 20 lbs. min.
- Durability: 750 cycles min.

### Function Description:

- Exceeds ANSI/TIA-568-C.2 requirements for 4 pair application
- Exceeds NEXT requirements for Cat.5e cables

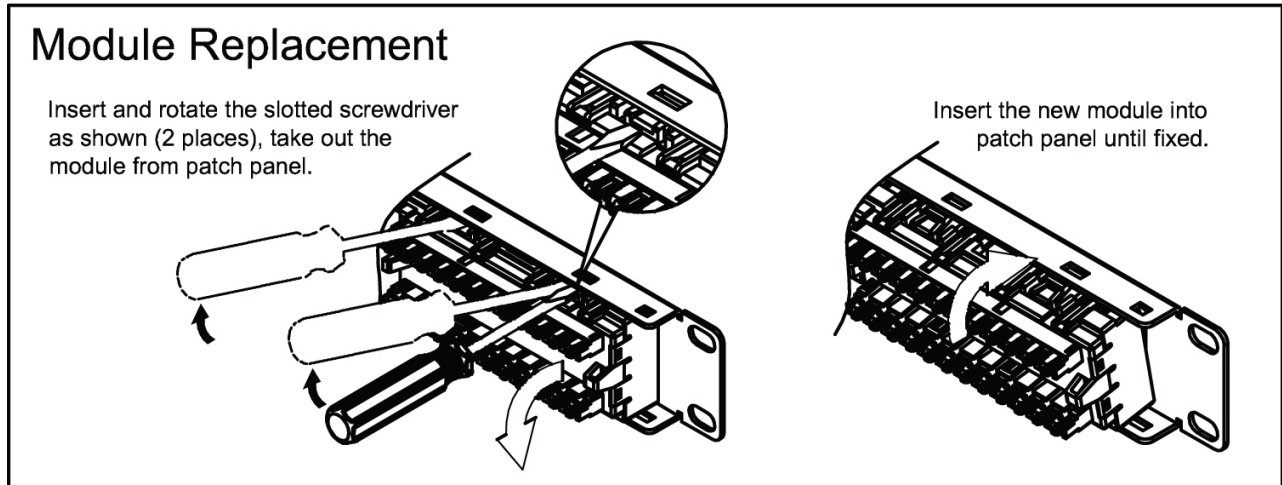
P/N	Description	Std Pkg Qty	Std Ctn Qty
1501-88019	RJ45 plug for unshielded solid wire 26-24AWG (3 prong).	1000	6000
1501-88020	RJ45 plug for unshielded stranded wire 26-24AWG (2 prong)	1000	6000
1501-88007	RJ45 plug for shielded solid wire 26-24AWG (3 prong)	1000	6000
1501-88002	RJ45 plug for shielded stranded wire 26-24AWG (2 prong)	1000	6000



## 19" Patch Panel

### 110 and Krone Type Patch Panel:

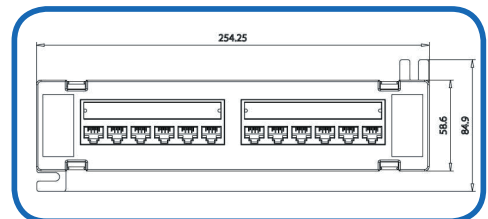
- High performance, exceeds Category 5e requirements
- 110 type and Krone type IDC termination
- 19" 24 port patch panel, 1U size & 48 port panel, 2U size
- Accepts 22-26 AWG, stranded or solid wire
- Meets ANSI/TIA-568-C.2 & ISO/IEC 11801
- Wiring:T568A/ B



P/N	Description	Std Ctn Qty
1402-03019	Cat.5e 19" 110/ Krone Patch Panel 24 ports, 1U size, Component level	25
1402-03020	Cat.5e 19" 110/ Krone Patch Panel 48 ports, 2U size, Component level	10

## Wall Mount Patch Panel

- ANSI/TIA-568-C.2 Cat.5e connecting hardware performance
- Mounted on 89D bracket
- Hinged/ Snapped style windows
- Wiring:T568A/ B
- UL 1863 Safety Listed



P/N	Description	Std Ctn Qty
1403-03051	Cat.5e wall mount 110 patch panel 12ports	25

## E/F Jacks

### Industry Standard:

- UL Listed
- Meet all requirements specified in connecting hardware requirement of ANSI/TIA-568-C.2 Cat.5e

### Physical:

- Multi use E/F Jacks can be used in E/F Tools and also punch down tool
- 110 type IDC termination
- IDC connector accepts 22-24 AWG solid wire
- Jack wiring: 50 u" gold plated over 100 u" nickel
- Housing: High impact flame retardant plastic UL94V-0 rated

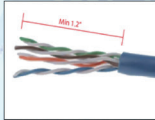





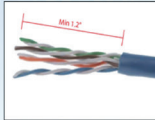
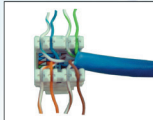




### Mechanical:

- Plug insertion life: 750 cycle min.
- Plug retention force: 50N for 60sec.


### Electrical:

- Current rating: 1.5 Amps
- Insulation resistance: 500 Mega-ohms min.
- Contact resistance: 20 milli-ohms max.
- DC resistance: 0.1 ohms max.
- Transmission quality verified up to 100MHz

### AS LITTLE AS 43 SECONDS FROM START TO FINISH !

00:05	00:37	00:39	00:40	00:41	00:43	<p style="color: blue; font-weight: bold;">- TERMINATE</p> <p style="color: blue; font-weight: bold;">- CRIMP</p> <p style="color: blue; font-weight: bold;">- CUT</p> <p style="color: blue; font-weight: bold;">- DONE !</p>
						
						

P/N	Description	Std Pkg Qty	Std Ctn Qty
1305-03030	Cat.5e horizontal type Keystone E-Jack, T568A/ B, white	100	600
1305-03039	Cat.5e horizontal type Keystone E-Jack, T568A/ B, blue	100	600
1305-03042	Cat.5e horizontal type Keystone E-Jack, T568A/ B, green	100	600
1305-03040	Cat.5e horizontal type Keystone E-Jack, T568A/ B, red	100	600
1305-03041	Cat.5e horizontal type Keystone E-Jack, T568A/ B, yellow	100	600
1305-03048	Cat.5e vertical type Keystone F-Jack with shutter, T568A/ B, white	100	600
1305-03047	Cat.5e vertical type Keystone F-Jack, T568A/ B, white	100	600
6103-01005	E-Tool, for horizontal type Keystone E-Jacks	15	30
6103-01006	F-Tool, for vertical type Keystone F-Jacks	15	30



## RJ-45 Keystone Jack

### Industry Standard:

- UL Listed
- Meets FCC parts 68
- EN50173
- ISO/IEC 11801
- Meets ANSI/TIA-568-C.2 Cat.5e Hardware transmission performance

### Physical:

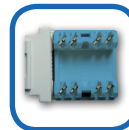
- IDC connector accept 22-26 AWG solid wire
- Jack wiring: 50 u" gold over 100 u" nickel
- Housing: High impact flame retardant plastic UL 94V-0 rated
- IDC connector suitable for 110 punch down and Krone tool

### Mechanical:

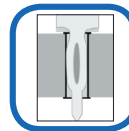
- Plug insertion life: 750 cycle min.
- Plug retention force: 30 lbs min.

### Electrical:



- Current rating: 1.5 Amps
- Insulation resistance: 500Mega-ohms min.
- Contact resistance: 20 milli-ohms max.
- DC resistance: 0.1 ohms max.
- Data transmission rates up to 100Mbps



IDC connector with large space between each pair to improve crosstalk

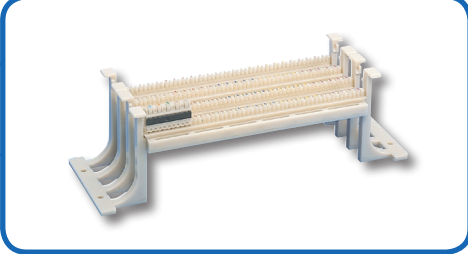
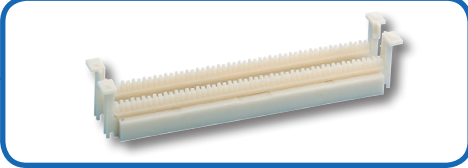


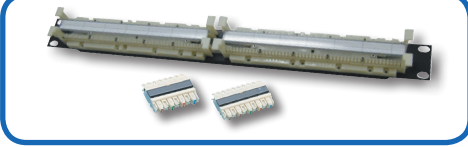


Press fit IDC connector terminal for high frequency application

P/N	Description	Std Pkg Qty	Std Ctn Qty	
1305-03014	Cat.5e RJ-45 110/Krone, horizontal type Keystone Jack, T568A/B Component level	100	600	
1305-03015	Cat.5e RJ-45 110/Krone, vertical type Keystone Jack, T568A/B Component level	100	600	



## 110 Cross-Connect Block & Panel

- Labels are placed on top of label holders.
- Exceeds ANSI/TIA-568-C.2 Category 5e performance specifications
- Terminates 22 AWG through 26 AWG solid or stranded wire
- Wiring blocks and connecting blocks sold separately
- 19" Cross-Connect Panel make terminations from the front

P/N	Description	Std Ctn Qty	
1801-01003	Wiring blocks w/Mounting legs, w/label holder, w/o connecting blocks, 50pair	-	
1801-02002	Wiring blocks w/Mounting legs, w/label holder, w/o connecting blocks,100pair	-	
1801-02001	Wiring blocks w/Mounting legs, w/label holder, with connecting blocks,100pair	-	
1802-01005	Wiring blocks w/o mounting legs, w/label holder, w/o connecting blocks,50pair	160	
1802-02002	Wiring blocks w/o mounting legs, w/label holder, w/o connecting blocks,100pair	-	
1804-03002	Connecting blocks, 4pair	4,800	
1804-04001	Connecting blocks, 5pair	4,800	
1803-02004	19" cross-connect panel, 100pair, w/lable holder, w/connecting block	14	

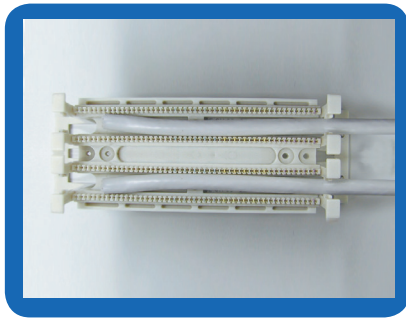
## 110 to RJ-45(110) Patch Cord

- Make quick, simple 110-block connections
- Category 6 stranded cable, colored pvc jacket
- 110 to RJ-45 type to convert one channel on a 110 block to a modular jack
- 110 to 110 type to link two 110 blocks
- Wiring: T568B(110 to RJ-45 type), straight-through (110 to 110 type)

P/N	Description	Length(M)	Color	Std Ctn Qty	
1202-03001	Patch cord T568B(110 to RJ-45 type)	3	Gray	100	
1203-03003	Patch cord straight-through(110 to 110 type)	3	Gray	100	

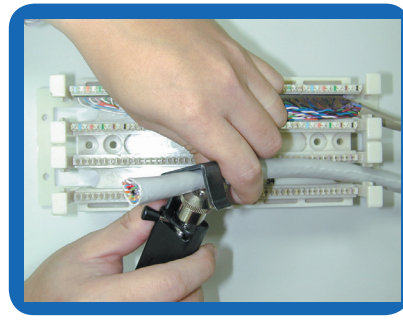


## 110 Cross-Connect Block Installation Step



**Step 1:**

Mount the wiring base and legs onto a suitable mounting surface with the necessary screws and hardware. Then place the cables through the appropriate openings in the wiring base.



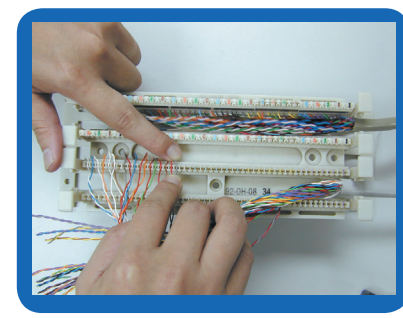
**Step 2:**

Strip off the cable jacket with the jacket stripping tool.



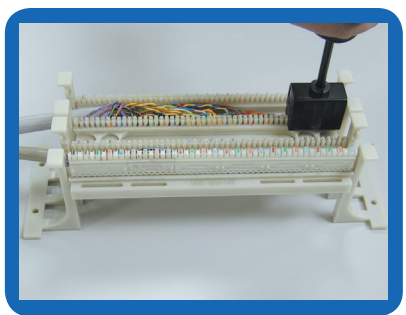
**Step 4:**

Seat the conductors and trim off the excess wire with the cutting edge of the impact tool.



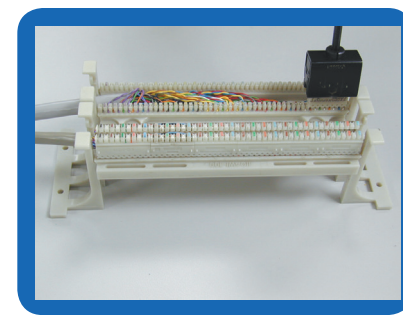
**Step 3:**

Seat the wires in accordance with the correct wiring scheme (see page No.83 to page No.84) onto the wiring base.



**Step 5:**

Insert a 4 pair or 5 pair 110 connecting block into the head of the impact tool.



**Step 6:**

seat the 110 connecting block with the impact tool onto the wiring base.

## 4 Pair F/UTP Cable

### Application:

- Voice
- T1
- ISDN
- 10Base T(IEEE 802.3)
- Fast Ethernet(IEEE802.3)
- 100Vg-AnyLAN(IEEE 802.12)
- Token Ring(IEEE 802.5)
- TP-PMD(ANSI X3T9.5)
- 100Base-T Ethernet (IEEE 802.3u)
- 155/622Mbps ATM
- 1000Base-T
- 550MHz Broadband video
- Power over Ethernet PoE / PoE+

### Industry Standard:

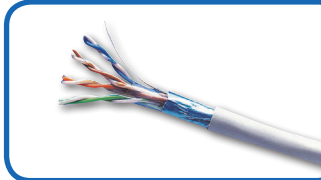
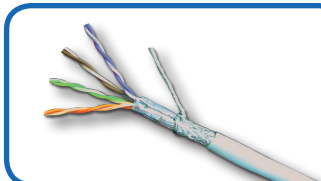
- UL, ETL Verified
- ANSI/TIA-568-C.2
- ISO/IEC 11801
- EN 50173

### Cable Data:

- No. of Pairs: 4
- Size of conductor: 24AWG Bare Solid Copper
- Jacket Color: Gray
- Shield: Mylar-Aluminum/ Mylar tape/ Tinned
- Drain Wire: 24AWG stranded copper
- Insulation: HDPE
- Nom.O.D.: 6.2±0.2mm
- Flame Rating: CM

### Product Electrical Characteristics:

- Impedance: 100±15 ohms
- DC Resistance, max. ohms/100m: 9.38
- DC Resistance, max. Unbalance of a pair: 5%max
- Capacitance Unbalance(Pair to Ground): 330pf/ 100m max.
- Propagation Delay Skew: 45nS/100m max.

P/N	Description	Jacket	Color	Std Pkg Qty	
1103-03003	Cat.5e 4 Pair F/UTP Cable	PVC	Gray	305M/ Pull Box	
1105-03001	Cat.5e 4 Pair SF/UTP Cable with braiding	PVC	Gray	305M/ Pull Box	

→ For LSZH requirements, please contact us.

Frequency (MHz)	SRL(db) Minimum	Impedance ohm	Attenuation Max. dB/100M	Attenuation Max. dB/1000ft	NEXT Minimum dB/100m
0.772	--	100±15	--	--	64
1	25	100±15	--	--	62
4	25	100±15	4.1	12.5	53
8	25	100±15	5.8	17.7	48
10	25	100±15	6.5	19.8	47
16	25	100±15	8.2	25	44
20	25	100±15	9.3	28.3	42
25	24	100±15	10.4	31.7	41
31.25	23	100±15	11.7	35.7	39
62.5	20	100±15	17.0	51.8	35
100	18	100±15	22.0	67.1	32
125	--	100±15	25.0	76.3	31

## Fully Shielded 19" Patch Panel

### Transmission:

→ Meets ANSI/TIA-568-C.2 Cat.5e Hardware transmission performance

### Environmental conditions:

→ Temperature range:  
Storage: -40°C to +70°C  
Operational: -10°C to +60°C  
→ Relative humidity (operational):  
Maximum non-condensing 93%

### Electrical:

→ Insulation resistance: 10 Mega ohms min.  
→ Dielectric with standing voltage: 1,000 Volts, RMS, 60Hz, 1min.  
→ Contact resistance: 20 milli ohms max.  
→ Current rating: 1.5 AMPS at 20°C

### Mechanical:

→ Total mating force: 800 grams for a 8 wire leads min.  
→ Retention: 30 lbs min. between the jack and plug.  
→ Insulation/Extraction life: 750 cycles minimum.  
→ Number of IDC terminations: 200 minimum.

### Physical:

→ Housing: High-impact, flame-retardant plastic, UL94V-0 rated spring wire/contact blades.  
→ Material: Phosphor Bronze Alloy.  
→ Plating: 24 Carat hard gold (50u" plating thickness) over 100 u" nickel.  
→ Sheel: Brass alloy plated with 100u" nickel.  
→ Plate: SPCC-SD 16G.

P/N	Description	Std Ctn	Qty
1402-03022	Cat.5e 19" 110/Krone type fully shielded patch panel 24 ports, 1U size Component level	10	

8 in 1 module

## Cat.5e shielded channel performance test configuration-ETL verified

**REPORT INTERTEK/ETL SEMKO**  
3933 US ROUTE 11, CORTLAND, NEW YORK 13845  
ORDER NO.: 3046481-006      DATE: February 13, 2004

REPORT NO.: 3046481-004

RENDERED TO:  
Dintek Electronics Ltd.  
5F, No. 8, Lane 97 Wu-Kong Road  
Wu-Ku Industrial Dist., Hsin Chuang  
Taipei Hsien, Taiwan  
TAIWAN, REP. OF CHINA

TEST: Performance testing of the cabling configurations as defined in, and to the requirements of, TIA/EIA-568-B.1 for Category 5e Cabling Systems.

STATEMENT OF LIMITATIONS: At the client's request, the purpose of this report is to provide electrical performance data on the test sample. It is not valid to use this report for any other purpose.

STANDARDS USED:  
ASTM D4595-98, dated December 10, 1998, Standard Test Methods for Electrical Performance Properties of Insulators and Joints for Telecommunications Wire and Cable  
TIA/EIA-568-B.1, dated April 12, 2001, Commercial Building Telecommunications Cabling Standard  
TIA/EIA-568-B.2, dated April 23, 2001, Commercial Building Telecommunications Cabling Standard

AUTHORIZATION: The tests were authorized by Mr. Maggie Chen, representing the client, Dintek Electronics Ltd. The samples were received on 2/12/04 in good condition. The samples were tested for performance testing only and are not ETL Verified.

DATE OF TEST: February 13, 2004

Page 1 of 5

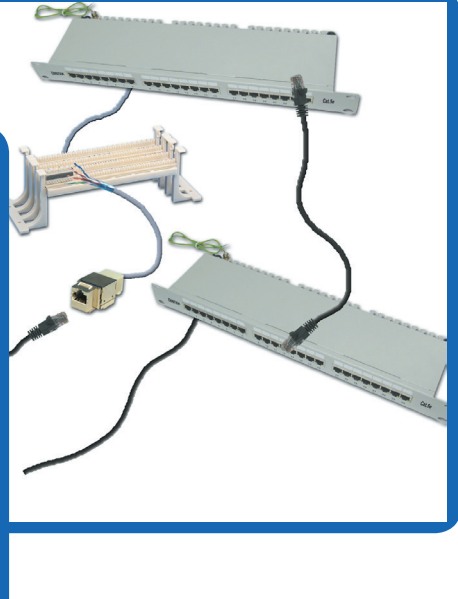
Report No.: 3046481-004      Page 2 of 5      Date: February 13, 2004

AMPLE DESCRIPTION:  
Patch Panel (Component)

Component ID	Manufacturer	Part Number	Description
1, 5, 7	Dintek	1201-03	Equipment Cord, 3m
2	Dintek	3105-03	Fully Shielded Keystone Jack
3	Dintek	1105-03	STP Horizontal Cable, 90m
4, 6	Dintek	1402-03	Fully Shielded Patch Panel

EQUIPMENT LIST:  
No following equipment was employed in conducting the tests.

Equipment Used	Model Number	Serial Number	Calibration Date
Hewlett Packard Automatic Cable Test System	HP4162A	3903U1003	NA



## Fully shielded Keystone Jack

**Electrical:**

- Electrical insulation resistance: 500 mega ohms min.
- Dielectric with standing voltage: 1,000 V, RMS, 60Hz, 1min.
- Contact resistance: 20 milli ohms max.
- Current rating: 1.5 AMPS at 20°C

**Mechanical:**

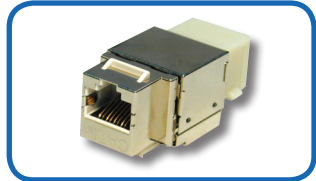
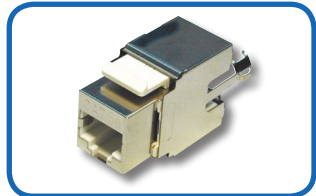
- Total mating force: 800 grams for a 8 wire leads minimum.
- Retention: 30lbs min between the jack and plug.
- Insertion/Extraction life: 750 cycles minimum.
- Number of IDC terminations: 200 minimum.

**Transmission performance:**

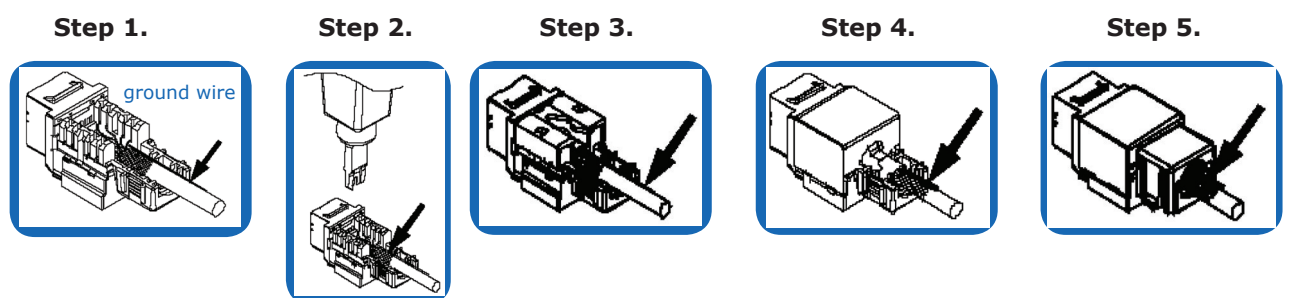
- UL Listed
- Meets all cat.5e Hardware transmission performance specified in ANSI/TIA-568-C.2

**Physical:**

- Housing: High-impact, flame-retardant plastic, UL94V-0 rated.
- Spring wire/contact blades: Phosphor bronze alloy.
- Plating: 24 Carat hard gold (50u" plating thickness) over 100u" nickel.
- Shell: Brass alloy plated with 100u" nickel.

P/N	Description	Std Pkg Qty	Std Ctn Qty	
1305-03023	Cat.5e 110/ Krone horizontal type fully shielded keystone Jack, T568A/ B Component level	100	600	
1305-03024	Cat.5e 110/ Krone vertical type fully shielded keystone Jack, T568A/ B Component level	100	600	

### Horizontal fully shielded keystone jack installion step



### Vertical fully shielded keystone jack installion step



## Fully shielded Toolless Keystone Jack

### Electrical:

- Electrical insulation resistance: 500 mega ohms min.
- Dielectric with standing voltage: 1,000 V, RMS, 60Hz, 1min.
- Contact resistance: 20 milli ohms max.
- Current rating: 1.5 AMPS at 20°C

### Mechanical:

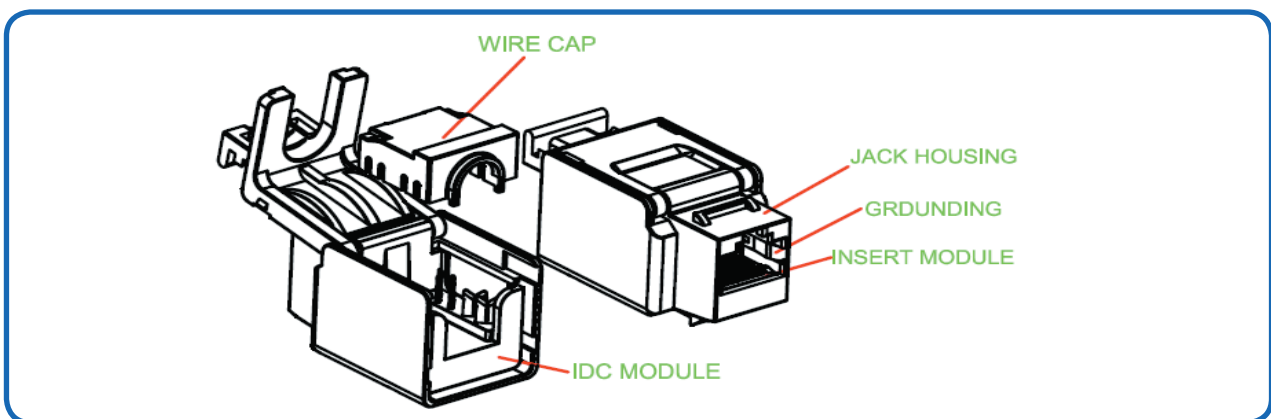
- Retention: 50N for 60sec.
- Insertion/Extraction life: 750 cycles minimum.
- Number of IDC terminations: 200 minimum.

### Transmission performance:

- UL Listed
- Meets all cat.5e Hardware transmission performance specified in TIA/EIA-568B.2

### Physical:

- Housing: Zinc-alloy fully shielded
- Spring wire/contact blades: Phosphor bronze alloy, Plating hard gold (50u" plating thickness) over 100u" nickel.
- IDC: Phosphor Bronze Alloy with 100u" 9:1 Sn-Pb alloy



P/N	Description	Std Pkg Qty	Std Ctn Qty
1305-03033	Cat.5e Fully shielded Toolless Keystone Jack, T568A/ B	100	600

