



**INFRASTONE**

**BLACKSTONE 10G 6A(U/UTP)**

Europe, Middle East and Africa regions

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# Cat 6A 23AWG U/UTP Cable 500MHz

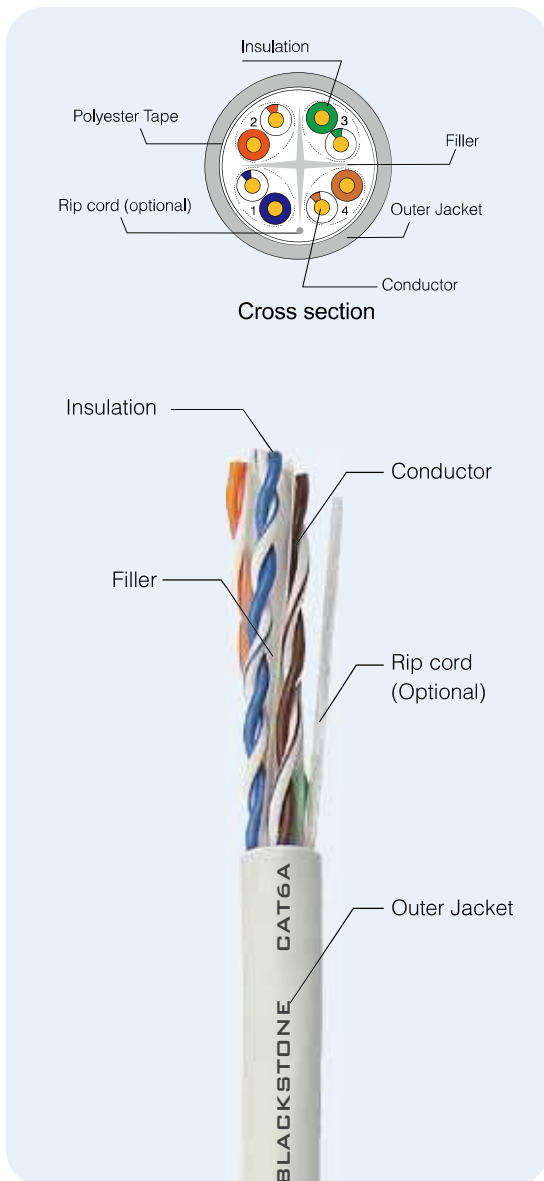
## Description

- Rated temperature:75°C
- Reference standard: UL Subject 444,EIA/TIA 568C & ISO / IEC 11801, IEC 61156
- Oxygen free copper conductor
- Colour-Coded PE insulation
- Rip Cord (optional)
- PVC,PE or LSZH jacket
- Packaging: Reel,Reel in Box or Reelex II

## Application

- 100 BASE-T4
- 100 BASE-TX
- 100VG-AnyLAN
- 1000Base-T
- 1000 BASE-TX
- 10G BASE-T
- 155 Mbps ATM
- 622 Mbps ATM

## Product Figure



## Physical Characteristics

Structure	Construction	U/UTP
	Number of Pairs	4 Pair
	AWG	23AWG
	Conductor Dimension(mm)	Per customer request
Insulation	Solid or Stranded; OFC or Tinned	Solid OFC
	Insulation Material	PE
	Insulation Dimension(mm)	Per specification request
	Number Colour (Ring or Strip Marking)	1.white/blue & blue 2.white/orange & orange 3.white/green & green 4.white/brown & brown
Shield	Cross Filler	Yes
	Individual Shield & Material	No
	Outer Shield & Material	No
Outer Jacket	Drain Wire	No
	Outer Jacket Material	V/PVC,E/PE,L/LSZH
	Outer Jacket Ripcord	Per customer request
Mechanical characteristics	Overall Nominal Diameter (mm)	Per specification request
	Operating Temp. Range	-20~75°C
	Bulk Cable Weight (KG)	Per specification request
	Max, Recommended Pulling Tension	100N
	Min. Bend Radius (Install)	8 × O.D.
	Flame Test	CMX, CM, CMR,IEC60332-1
Electical Characteristics	Nom, Mutual Capacitance@1kHz	≤ 5.6nF / 100M
	Max. Capacitance Unbalance ( pF/100m)	≤ 160pF / 100M
	Nominal Velocity of Propagation	65%
	Max.Delay Skew (ns/100m)	≤45ns/ 100M
	Max.Conductor DC Resistance @ 20 Deg. C	Per specification request
	Max.DC Resistance Unbalance @ 20 Deg. C	≤ 2%
	Max. Insuation Resistance (MΩ/km)	5000
	Max. Operating Voltage UL	300V

NOTE: TYPE \* (\*=V/PVC, L/LSZH, X/CM, R/CMR, E/PE)



PN:BSCA46A000

## INFRASTONE CAT 6A 23AWG U/UTP CABLE 500MHZ

### Electrical Characteristics(TIA/EIA-568C)

Transmission Frequency(MHz)	1	4	10	16	20	25	31.25	62.5	100	125	200	300	400	500
Impedance(ohms)	100±15	100±15	100±15	100±15	100±15	100±15	100±15	100±15	100±15	100±25	100±25	100±25	100±25	100±25
ATT(dB/100m)	2.1	3.8	5.9	7.5	8.4	9.4	10.5	15.0	19.1	21.5	27.6	34.3	40.1	45.3
RL(dB)	20	23	25	25	25	24.3	23.6	21.5	20.1	19.4	18	16.8	15.9	15.2
NEXT(dB)	74.3	65.3	59.3	56.2	54.8	53.3	51.9	47.4	44.3	42.8	39.8	37.1	35.3	33.8
PSNEXT(dB)	72.3	63.3	57.3	54.2	52.8	51.3	49.9	45.4	42.3	40.8	37.8	35.1	33.3	31.8
ELFEXT(dB)	67.8	55.8	47.8	43.7	41.8	39.8	37.9	31.9	27.8	25.9	21.8	18.3	15.8	13.8
PSELFEXT(dB)	64.8	52.8	44.8	40.7	38.8	36.8	34.9	28.9	24.8	22.9	18.8	15.3	12.8	10.8
TCL(dB)	40	40	40	38	37	36	35.1	32	30	29	27	25.2	24	23
DELAY(ns/100m)	570	552	545	543	542	541	540	539	538	537	537	536	536	536
PSAACRF(dB)	67	66.2	58.2	54.1	52.2	50.2	48.3	42.3	38.2	36.6	32.2	28.7	26.2	24.2

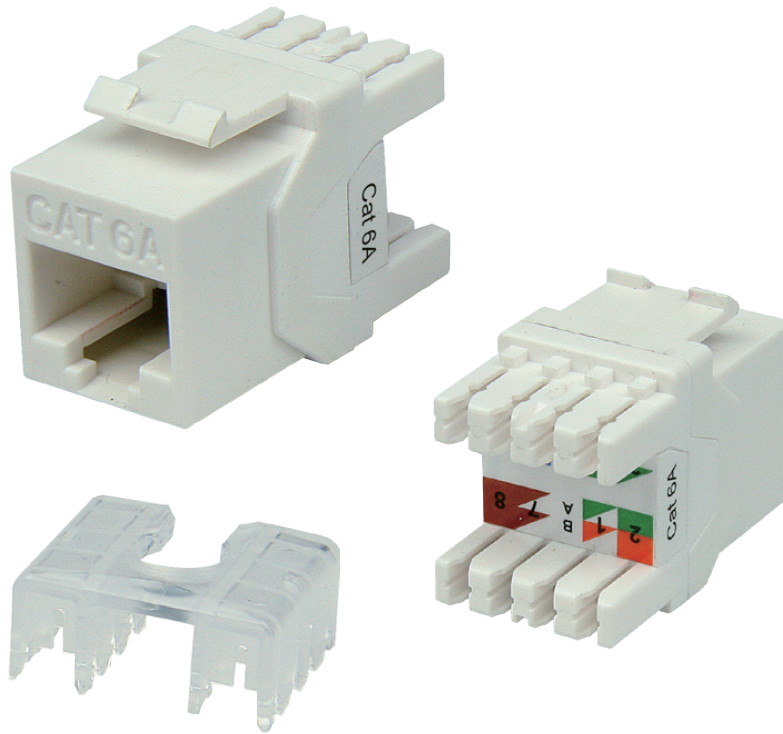
### Electrical Characteristics(IEC-61156)

Transmission Frequency(MHz)	4	10	16	20	25	31.25	62.5	100	125	200	250	300	400	500
Impedance(ohms)	100±15	100±15	100±15	100±15	100±15	100±15	100±15	100±15	100±25	100±25	100±25	100±25	100±25	100±25
ATT(dB/100m)	3.7	5.9	7.4	8.3	9.3	10.4	14.9	19	21.4	27.5	31	34.2	40	45.3
RL(dB)	23	25	25	25	24.3	23.6	21.5	20.1	19.4	18	17.3	16.8	15.9	15.2
NEXT(dB)	65.3	59.3	56.2	54.8	53.3	51.9	47.4	44.3	42.8	39.8	38.3	37.1	35.3	33.8
PSNEXT(dB)	63.3	57.3	54.2	52.8	51.3	49.9	45.4	42.3	40.8	37.8	36.3	35.1	33.3	31.8
ELFEXT(dB)	55.8	47.8	43.7	41.8	39.8	37.9	31.9	27.8	25.9	21.8	19.8	18.3	15.8	13.8
PSELFEXT(dB)	52.8	44.8	40.7	38.8	36.8	34.9	28.9	24.8	22.9	18.8	16.8	15.3	12.8	10.8
TCL(dB)	40	40	38	37	36	35.1	32	30	29	27	26	25.2	24	23
DELAY(ns/100m)	552	545.4	543	542	541.2	540.4	538.6	537.6	537.2	536.5	536.3	536.1	535.8	535.6
PSAACRF(dB)	66.2	58.2	54.1	52.2	50.2	48.3	42.3	38.2	36.3	32.2	30.2	28.7	26.2	24.2

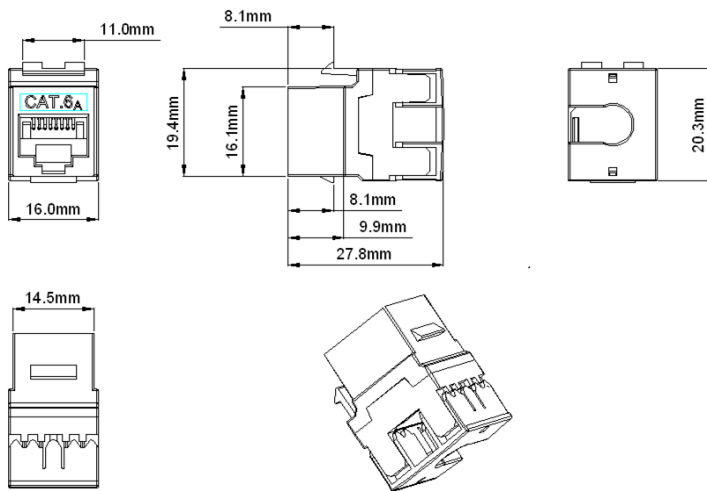
**Note:** The table provides reference values only. All parameters comply with the governing equations given above over the entire frequency range. All values and equations apply to worst-case channels utilizing four-pair INFRASTONE CAT6A series cable/cordage with full cross-connects, consolidation points and work area outlets (4connections in a channel) for the length up to 100 meters.



P/N: BSKJU1806-A



**PRODUCT FIGURE**



**DESCRIPTION**

The new style Jack provides Category 6A system performance and user-friendly installation features. A shielded is available to maximum protection from EMI/RFI interference, the compact size provides high-density connectivity in the work area and telecommunications room.

**APPLICATION**

- Available in Cat6A, T568A/B wiring, meet or exceed TIA/EIA Cat6A requirements
- Shielding protects against EMI/RFI interference
- Housing : high temperature thermoplastic
- Compact jack design, 8 positions and 8 conductors
- Contact : phosphor bronze , phosphor bronze with 6 to 50µ"gold plate
- Accept 22-26 AWG solid with a insulation diameter of 0.4-0.6 mm
- Easy to be terminated, low attenuation loss and high return loss
- High reliability and superior performance
- Available in different colors

**CONSTRUCTION**

Description	Parameter
Contact resistance(max)	100mΩ
Insulation resistance (min)	500MΩ
Return loss (dB)	5.8dB
Next (dB)	4.7dB
Ps next(dB)	5.5dB

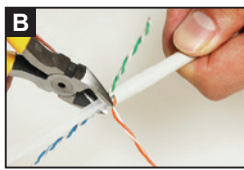


## CAT 6A KEYSTONE JACKS

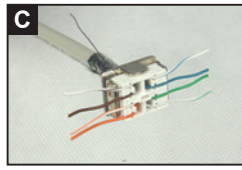
### INSTALLMENT INSTRUCTIONS



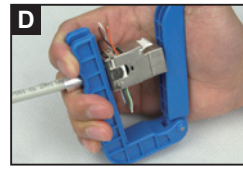
Strip approximately 4 cm of the cable jacket.



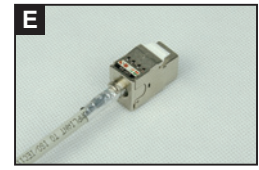
Cut the pair separator and rip cord (if present) as close as possible to the jacket. Note: Be careful not to nick conductors.



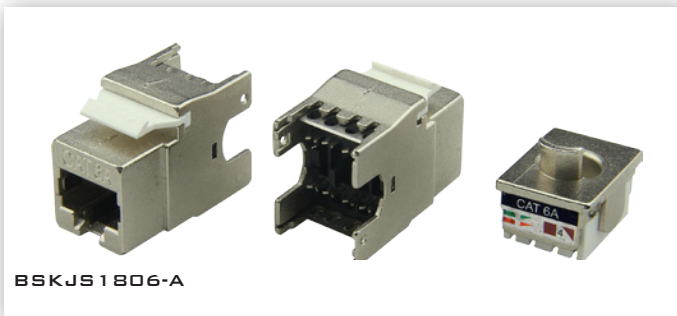
Insert each wire into the appropriate channel according to the color code on the module.



Press the front part of shield case into the module tightly using InfraStone tool (P/N: ISAA02).

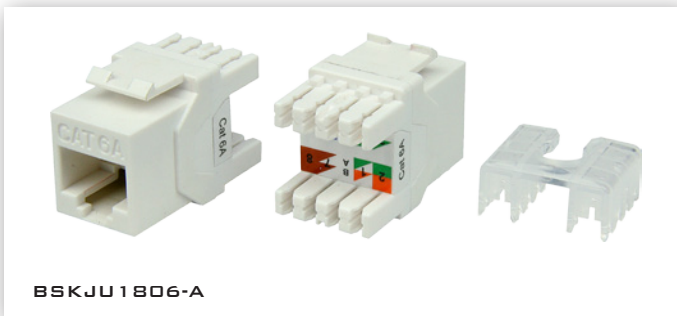


Finish the installment.



BSKJS1806-A

#### INFRASTONE CAT6A SHIELDED KEYSTONE JACKS (180 DEGREE)



BSKJU1806-A

#### INFRASTONE CAT6A UNSHIELDED KEYSTONE JACKS (180 DEGREE)

Part number	Description	Standard color	Inner box	Carton	Carton measurement	Carton weight
BSKJS1806-AF	Cat6A shielded keystone jacks (180 degree)	Silver	20PCS	200PCS	L 53.5cm×W 31.3cm×H 23.4cm	9.20KG
BSKJU1806-A	Cat6A unshielded keystone jacks (180 degree)	White	25PCS	250PCS	L 53.5cm×W 31.3cm×H 23.4cm	3.80KG



# CAT 6A 24-PORT PATCH PANEL

P/N: BSPPM60024A

**BOLD PORT NUMBERING ENABES QUICK AND READY IDENTIFICATION OF OUTLETS .**

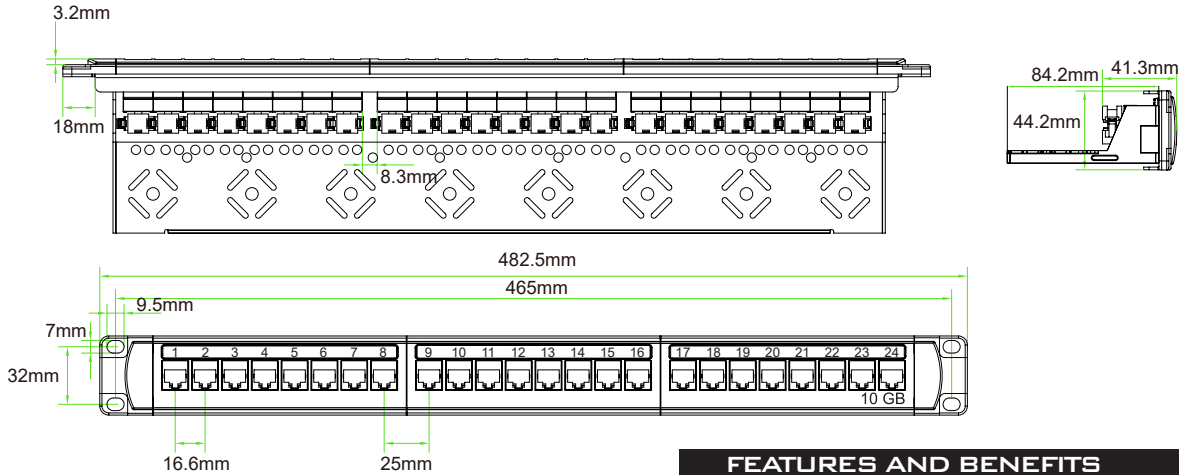
**FRONT SURFACE IS UNINTERRUPTED BY SCREW HEADS FOR A CLEAN APPEARANCE .**



Blank anodized panels can be mounted directly to an EIA standard 19 inch rack or cabinet

Feature universal wiring for both T 568A and T 568B and voice application .

## PRODUCT FIGURE



## DESCRIPTION

The InfraStone shielded patch panels are loaded with shielded keystone jacks , which are housed in a closure full shielding metal enclosure designed to meet highest industry requirement.A shielded version is also available to maximum protection from EMI/RFI interference. By utilizing fully shielded jacks and connecting hardware, you can reduce the effects of interference on the network data transmissions.

## FEATURES AND BENEFITS

- Design to mount to any standard 19" rack or cabinet
- 24 -port Cat 6A shielded Patch panel
- Space saving, high-density 1U
- Black Electrostatic Powder-Coated Steel: phosphor bronze with tin plating over nickel . Meet or exceed the requirement of ANSI /TIA/EIA 568B.2
- Use keystone jacks and keystone inserts to configure your panel to accommodate a variety of schemes
- Sturdy Aluminum Plate around RJ 45 Jacks
- Phosphor bronze with 6-50 micro inches gold plated
- Available with T568 A. T568 B wiring pattern and meeting the requirement of Cat 6A standard
- Color Coded TIA/EIA 568A (international) and 568B (AT&T Standard) Wiring For Easy Installation
- Termination accepts 22,24 26 AWG (0.64 ,0.5 and 0.4 )solid wires
- Metal sheet: Corrosion resistant steel
- Plastic: fire self -extinguish high impact plasti

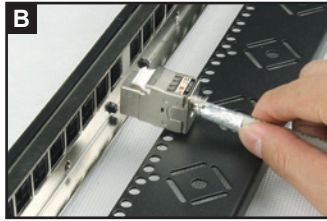


# CAT 6A 24-PORT PATCH PANEL INSTALLMENT INSTRUCTIONS

## INSTALLMENT INSTRUCTIONS



The bracket of Cat 6A patch panel.



Position the shielded keystone jack for installation.



Insert the jack into the mounting location properly.



BSC24-FAX6A

Cat 6A FTP 24-port patch panel



BSPPM60024A

Cat 6A UTP 24-port patch panel



BSPPM60024A-0

Empty panel

## ORDER INFORMATION

Part number	Description	Standard color	Inner box	Carton	Carton measurement	Carton weight
BSC24-FAX6A	24-port Cat6A shielded patch panels (jack style )(JKG06-SC6A)	Black	1PC	10PCS	L 53.5cm× W 31.3cm × H 23.4cm	17.00KG
BSPPM60024A	24-port Cat6 unshielded patch panels (jack style) (JKA09-UC6A)	Black	1PC	10PCS	L 53.5cm× W 31.3cm × H 23.4cm	10.00KG
BSPPM60024A-0	Empty panel	Black	1PC	10PCS	L 53.5cm× W 31.3cm × H 23.4cm	7.80KG





**DESCRIPTION**

- Adopt Cat6A stranded cable and Cat6A RJ45 modular plugs, the performance of patch cable can meet or exceeds all requirements for Cat6A standard . Compatible with Cat6A keystone jacks and Cat6A 24 port patch panel, guarantees 500MHz broadband transmission .

- Unique design of Cat6A RJ45 modular plugs and line pair decrease cross talk and increase allowance.
- Excellent attenuation and crosstalk continuity
- Meet or exceed the requirement for U/UTP system
- 100% tension test
- Allow RJ45 plugs to provide high-density solution
- Available in different colors
- They are available in a variety of the length

**APPLICATION**

- Communication outlet
- Concentration point
- Patch panel
- Equipment termination

**MECHANICAL CHARACTERISTIC;**

- Durability: 1000 plugging
- Contact: phosphor bronze with 1-50µ" gold plating
- Nominal outer diameter: 5.8±0.2mm

**PHYSICAL CHARACTERISTICS**

- Conductor: 24 AWG bare copper
- Insulation material: PE
- Structure: 4 twisted pair
- Jacket for RJ45 plug: PVC
- Material for RJ45 plus: PC polycarbonate
- Flame test: IEC60332-1

**ORDER INFORMATION**

Part number	Description	Inner box	Carton measurement
BSAC0100A-UXD06A-**-#	Cat 6A U/UTP Patch Cable	1PC	L 53.5cm× W 31.3cm × H 23.4cm
BSACLSZH0100A-UXD06A-**-#	Cat 6A U/UTP Patch Cable	1PC	L 53.5cm× W 31.3cm × H 23.4cm

Use \* to specify the length : 1=1 meter, 2= 2 meters , 3=3 meters

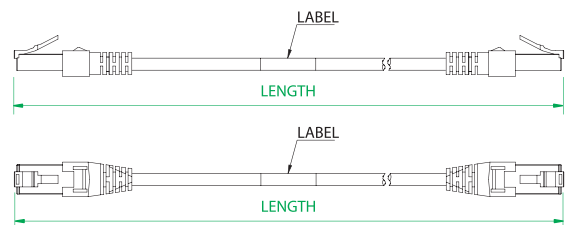
Use # to specify the color : A = black B =blue C =red D= orange E=yellow F= gray G =green



**ELECTRICAL CHARACTERISTICS**

Dielectric strength	1,000V RMS 60Hz/1min
Voltage Class(maximum)	150VAC
Rated current(maximum)	1.5A
Insulation resistance(minimum)	500megohm
Contact resistance(maximum)	10milliohm

**PRODUCT FIGURE**



**Channel Identification (4 connector model)**

**Horizontal cable:** Black Stone Cat6A Cable ID code: BSCA46A0000

**Cords:** Black Stone Cat6A Patch Cable ID code: BSAC/1/2/3/5M6A00-UXD06A-\*-#

**Plug:** Black Stone Cat6A Plug ID code: UXD06A

**Socket:** Black Stone Cat6A Keystone Jack ID code: BSK/B/C/S/06/08/09/10

**Wall Outlet:** Black Stone Cat6A Wall Outlet ID code: OTX/E/S/Z

**Patch Panel:** Black Stone Cat6A Patch Panel ID code: BSPPC6A00/24/485

**Generic cabling standards - Class EA Channel requirements**

- ISO/IEC 11801:2011 (Ed. 2.2)
- EN 50173-1:2011
- EN 50173-2:2007, including amendment A1:2010
- ANSI/TIA-568-C.2:2009



# 10G

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