

CFBBG | IP6A-24LFTP-02S-02S

Base Product



InstaPATCH® Cu GigaSPEED X10D® F/UTP LSZH Copper Cable, dual row standard density outlet to dual row standard density outlet, 24 links

Product Classification

Regional Availability	Asia Australia/New Zealand EMEA Latin America North America
Portfolio	CommScope®
Product Type	Copper trunk cable assembly
Product Brand	GigaSPEED X10D® InstaPATCH® Cu

General Specifications

ANSI/TIA Category	6A
Cable Type	F/UTP (shielded)
Conductor Type	Solid
Interface, Connector A	Information outlet
Interface Feature, connector A	Dual row Standard density
Interface, Connector B	Information outlet
Interface Feature, connector B	Dual row Standard density
Link Count	24
Wiring	T568B

Dimensions

Cable Assembly Length Range (m)	5 – 90
Cable Assembly Length Range (ft)	17 – 295

Electrical Specifications

dc Resistance, maximum	0.3 ohm
Safety Voltage Rating	300 V

Ordering Tree

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1	2	3	4	5	6	7	8	9	10	11	12				
C	A	A	A	C	-	1	1	H	A	B	B	F	0	5	0

Cable Type	Connector B	Orientation A	Orientation B
A Cat 6A X10D – U/UTP (Plenum)	A Outlet* – Single Row Standard Density	1 Trident Series Flat	1 Trident Series Flat
B Cat 6A X10D – U/UTP (Riser)	B Outlet* – Dual Row Standard Density	2 Right Paired Flat	2 Right Paired Flat
C Cat 6A X10D – U/UTP (LSZH)	C Outlet* – Dual Row High Density	3 Right Series Flat	3 Right Series Flat
D Cat 6A X10D – F/UTP (Plenum)	G RJ45 Plug* – Single Row Standard Density	4 Left Paired Flat	4 Left Paired Flat
E Cat 6A X10D – F/UTP (Riser)	H RJ45 Plug* – Dual Row Standard Density	5 Left Series Flat	5 Left Series Flat
F Cat 6A X10D – F/UTP (LSZH)	J RJ45 Plug* – Dual Row High Density	6 Trident Paired Flat	6 Trident Paired Flat
G Cat 6 XL – U/UTP (Plenum)	N 1100 Module	A Trident Series Angled	A Trident Series Angled
H Cat 6 XL – U/UTP (Riser)	R 360 1100 Evolve Module	B Right Paired Angled	B Right Paired Angled
J Cat 6 XL – U/UTP (LSZH)	S OneLink 2x6	C Right Series Angled	C Right Series Angled
K Cat 6A X10D – S/FTP (LSZH)	T OneLink 2x4	D Left Paired Angled	D Left Paired Angled
L Cat 6 – U/UTP Class B Rated (LSZH)		E Left Series Angled	E Left Series Angled
M Cat 6A – U/UTP Class B Rated (LSZH)		F Trident Paired Angled	F Trident Paired Angled
N Cat 6A X10D SD – U/UTP (Riser)			X Not Applicable

Connector A	Link	Outlet Color	Jacket Color	Bundling	Labeling
A Outlet* – Single Row Standard Density	B 6	0 Not Applicable	8 White (WH)	H Hook-n-loop	A Generic Label
B Outlet* – Dual Row Standard Density	C 8	1 Black (BK)	9 White (WH)	S Sleaving	
C Outlet* – Dual Row High Density	D 12	2 Blue (BL)	10 Slate (SL)		
G RJ45 Plug* – Single Row Standard Density	E 16	3 Blue (BL)			
H RJ45 Plug* – Dual Row Standard Density	F 18	4 White (WH)			
J RJ45 Plug* – Dual Row High Density	G 24				
N 1100 Module					
R 360 1100 Evolve Module					
S OneLink 2x6					
T OneLink 2x4					
X Unterminated					

UOM	Length
11 F Foot	12 XXX
M Meter	

- Cords > 1m are authorized for use in channels and are an effective standalone method used to connect active devices
- Cords < 1m are also valid elements for use in a channel or as an equipment interconnect, but due to their limited length are not guaranteed to meet component compliance requirements that were developed to assess the quality of longer cords

Environmental Specifications

Operating Temperature	-10 °C to +60 °C (+14 °F to +140 °F)
Environmental Space	Low Smoke Zero Halogen (LSZH)
Flammability Rating	UL 94 V-0

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

Included Products

- 3291B-4/23 – GigaSPEED X10D® 3291B Category 6A F/UTP Cable, low smoke zero halogen, 4 pair count
- HGS620 – GigaSPEED X10D® HGS-Series Modular Jack, RJ45, Cat6A, Shielded

3291B-4/23



GigaSPEED X10D® 3291B Category 6A F/UTP Cable, low smoke zero halogen, 4 pair count

Product Classification

Regional Availability	Asia Australia/New Zealand EMEA Latin America
Portfolio	SYSTIMAX®
Product Type	Twisted pair cable
Product Brand	GigaSPEED X10D®

General Specifications

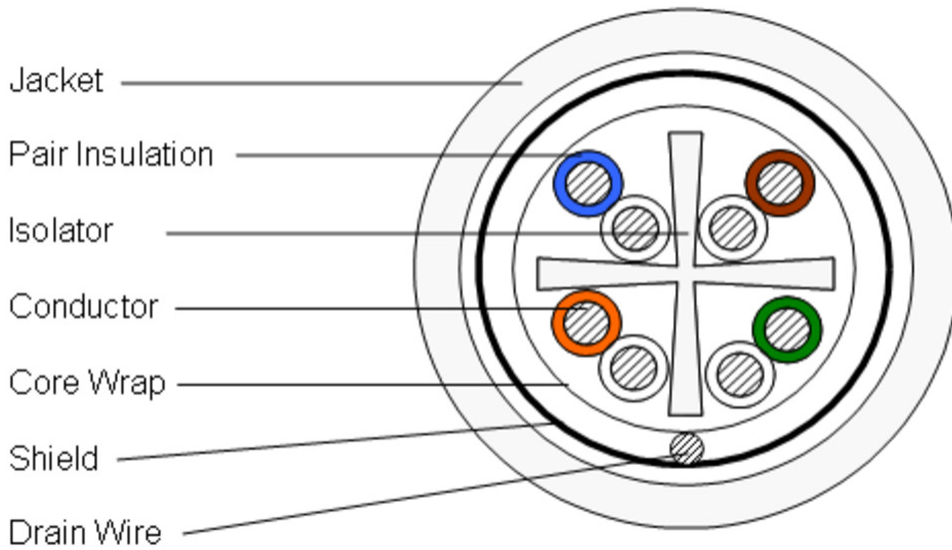
Product Number	3291B
ANSI/TIA Category	6A
Cable Component Type	Horizontal
Cable Type	F/UTP (shielded)
Conductor Type, singles	Solid
Conductors, quantity	8
Drain Wire Type	Solid
Pairs, quantity	4
Separator Type	Isolator
Transmission Standards	ANSI/TIA-568.2-D

Dimensions

Diameter Over Jacket, nominal	7.518 mm 0.296 in
Jacket Thickness	0.508 mm 0.02 in
Conductor Gauge, singles	23 AWG
Drain Wire Gauge	26 AWG

Cross Section Drawing

3291B-4/23



Electrical Specifications

dc Resistance Unbalance, maximum	4 %
dc Resistance, maximum	8 ohms/100 m 2.438 ohms/100 ft
Mutual Capacitance at Frequency	5.6 nF/100 m @ 1 kHz
Nominal Velocity of Propagation (NVP)	68 %
Operating Frequency, maximum	500 MHz
Operating Voltage, maximum	80 V
Remote Powering	Fully complies with the recommendations set forth by IEEE 802.3bt (Type 4) for the safe delivery of power over LAN cable when installed according to ISO/IEC 14763-2, CENELEC EN 50174-1, CENELEC EN 50174-2 or TIA TSB-184-A

Material Specifications

Conductor Material	Bare copper
Drain Wire Material	Tinned copper
Insulation Material	Polyolefin
Jacket Material	Low Smoke Zero Halogen (LSZH)
Separator Material	Polyolefin
Shield (Tape) Material	Polyester/Aluminum shield

Mechanical Specifications

Pulling Tension, maximum	11.34 kg 25 lb
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3291B-4/23

Environmental Specifications

Installation temperature	0 °C to +60 °C (+32 °F to +140 °F)
Operating Temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Acid Gas Test Method	IEC 60754-2
Environmental Space	Low Smoke Zero Halogen (LSZH)
Flame Test Method	IEC 60332-3-22
Smoke Test Method	IEC 61034-2

Packaging and Weights

Cable weight	52.309 kg/km 35.15 lb/kft
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Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

HGS620

Base Product



GigaSPEED X10D® HGS-Series Modular Jack, RJ45, Cat6A, Shielded

Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America | North America

Portfolio

SYSTIMAX®

Product Type

Modular jack

Product Brand

GigaSPEED X10D®

Product Series

HGS620

General Specifications

ANSI/TIA Category

6A

Application

Adapts to M Series and Keystone

Cable Type

Shielded

Conductor Type

Solid | Stranded

Outlet Type

High density

Termination Type

IDC

Wiring

T568A | T568B

Dimensions

Height

19.56 mm | 0.77 in

Width

17.02 mm | 0.67 in

Depth

33.53 mm | 1.32 in

Compatible Conductor Gauge, solid

22 AWG | 24 AWG

Compatible Conductor Gauge, stranded

22 AWG | 24 AWG

Electrical Specifications

Contact Resistance Variation, maximum

20 mOhm

Contact Resistance, maximum

100 mOhm

HGS620

Current Rating at Temperature	1.5 A @ 20 °C 1.5 A @ 68 °F
Dielectric Withstand Voltage, RMS, conductive surface	1,500 Vac @ 60 Hz
Dielectric Withstand Voltage, RMS, contact-to-contact	1,000 Vac @ 60 Hz
Insulation Resistance, minimum	500 mOhm
Remote Powering	Fully supports the safe delivery of power over LAN cabling described by IEEE 802.3bt (Type 4) and complies with the unloading under electrical load requirements prescribed by IEC 60512-99-002

Material Specifications

Contact Plating Material	Precious metals
Material Type	Copper alloy High-impact, flame retardant, thermoplastic Tin Zinc
Termination Contact Plating	Nickel

Mechanical Specifications

Plug Insertion Life, minimum	750
Plug Insertion Life, test plug	IEC 60603-7 compliant plug
Plug Retention Force, minimum	133 N 29.9 lbf

Environmental Specifications

Operating Temperature	-10 °C to +60 °C (+14 °F to +140 °F)
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Relative Humidity	Up to 95%, non-condensing
Flammability Rating	UL 94 V-0
Safety Standard	UL cUL