

CFBBD | IP6A-12LFTP-02S-02S

Base Product



InstaPATCH® Cu GigaSPEED X10D® F/UTP LSZH Copper Cable, dual row standard density outlet to dual row standard density outlet, 12 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 | 12 |
| 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

CFBBD | IP6A-12LFTP-02S-02S

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|----|----|---|---|---|---|
| 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) | | S Sleaving | |
| C Outlet* – Dual Row High Density | D 12 | 2 Blue (BL) | | | |
| G RJ45 Plug* – Single Row Standard Density | E 16 | 3 White (WH) | | | |
| H RJ45 Plug* – Dual Row Standard Density | F 18 | | | | |
| 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 |
|---------|--------|
| 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

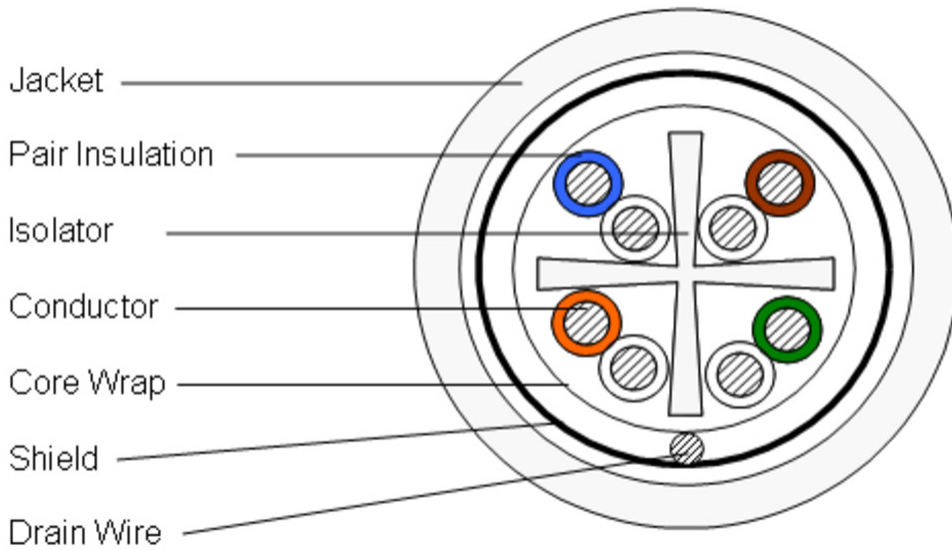
| | |
|--------------------------------|------------------|
| Product Number | 3291B |
| ANSI/TIA Category | 6A |
| Cable Component Type | Horizontal |
| Cable Type | F/UTP (shielded) |
| Conductor Type, singles | Solid |
| Conductors, quantity | 8 |
| Drain Wire Type | Solid |
| Pairs, quantity | 4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

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 |