

# JTGA104-B53S20

4x 10/100/1000Base-TX to 1x 1000Base-FX (Tx1550nm/Rx1310nm SMF 20km Single SC) Unmanaged Gigabit Ethernet Industrial Switch



## FEATURES & BENEFITS

- Complies with IEEE 802.3 ,IEEE 802.3u ,IEEE 802.3ab ,IEEE 802.3z 1000BASE-X Gigabit FiberIEEE 802.3x
- 4x 10/100/1000Base-TX
- 1x 1000Base-FX
- Auto-negotiation of Half-Duplex / Full-Duplex transfer mode
- Redundant Power Design
- Power Polarity Reverse Protection
- Overload Current Protection
- Extends fiber distance up to 20km
- Operating Case Temperature : -40~75
- DIN-Rail or Wall Mountable
- IP30 Corrosion resistant aluminum case

## Application

- Network Communication
- FTTH/FTTB/FTTx
- ISP Backhaul Networking

## OVERVIEW

JTGA104-B53S20 is an unmanaged Gigabit Ethernet industrial Switch is equipped with 4x 10/100/1000Base-TX and 1x 1000Base-FX interfaces that provides reliable and cost-effective network connectivity and fiber extension in harsh industrial environments, It is specifically designed to fulfill industrial applications such as industrial automation, security, power/utility, oil and gas, mining and outdoor environment.

## SPECIFICATIONS

|             |                 |
|-------------|-----------------|
| Data Rate   | 10/100/1000Mbps |
| Device Type | Unmanaged       |

### Interface Characteristics

|                  |                                                                                                                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Copper Interface | 4x 10/100/1000Base-TX                                                                                                                                                                                            |
| Fiber Interface  | 1x 1000Base-FX                                                                                                                                                                                                   |
| Wavelength       | Tx1550nm/Rx1310nm                                                                                                                                                                                                |
| Media            | SMF                                                                                                                                                                                                              |
| Distance         | 20km                                                                                                                                                                                                             |
| Connector        | Single SC                                                                                                                                                                                                        |
| LED indicators   | PWR (power supply);<br>FL/A (optical link/action)<br>FDX (FX full duplex),<br>TL/A (twisted pairs link/action)<br>100 (100M transmission rate of twisted pairs),<br>FX (100M transmission rate of optical fiber) |

### Technology

|                         |                                                                                                                                                              |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards and Protocols | IEEE 802.3 10BASE-T<br>IEEE 802.3u 100BASE-TX<br>IEEE 802.3ab 1000BASE-T<br>IEEE 802.3z 1000BASE-X Gigabit Fiber<br>IEEE 802.3x Full duplex and flow control |
| Processing Type         | Store and Forward                                                                                                                                            |

|              |                                                                    |
|--------------|--------------------------------------------------------------------|
| Flow Control | Half-duplex back-pressure and IEEE 802.3x full-duplex flow control |
|--------------|--------------------------------------------------------------------|

#### Power

|                   |                                                            |
|-------------------|------------------------------------------------------------|
| Power Input       | DC 12~52V                                                  |
| PoE Standard      | /                                                          |
| PoE Power Budget  | /                                                          |
| Power Consumption | <4W                                                        |
| Protection        | Overload current protection<br>Reverse polarity protection |

#### Switch Properties

|                    |           |
|--------------------|-----------|
| Switching Capacity | 10G       |
| Forwarding Rate    | 1.488Mbps |
| MAC address table  | 2K        |
| Packet Buffer      | 2MB       |
| Jumbo Frame        | 9K        |
| Delay              | <3μs      |

#### Physical

|               |                                                                                                                  |
|---------------|------------------------------------------------------------------------------------------------------------------|
| Casing Mat.   | Aluminum, IP30                                                                                                   |
| Dimensions    | 143 x 101 x 44mm                                                                                                 |
| Installation  | DIN-Rail                                                                                                         |
| Environmental | Operating temperature : -10~55°C<br>Storage Temperature: -40~85°C<br>Relative Humidity: 5% to 95% non-condensing |

#### Regulatory

|                   |                                                                                                                                                                                                                                              |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ISO               | Manufactured in ISO-9001 facility                                                                                                                                                                                                            |
| Safety & Emission | CE , FCC, RoHS                                                                                                                                                                                                                               |
| EMI               | FCC Part 15B Class A<br>EN 61000-6-4<br>EN 61000-3-2<br>EN 61000-3-3                                                                                                                                                                         |
| EMS               | EN 61000-6-2<br>EN 61000-4-2 (ESD Standards)<br>EN 61000-4-3 (Radiated RFI Standards)<br>EN 61000-4-4 (Burst Standards)<br>EN 61000-4-5 (Surge Standards)<br>EN 61000-4-6 (Induced RFI Standards)<br>EN 61000-4-8 (Magnetic Field Standards) |
|                   |                                                                                                                                                                                                                                              |

|                          |                                                                                |
|--------------------------|--------------------------------------------------------------------------------|
|                          | fall w/package)                                                                |
| Stability<br>Reliability | IEC 60068-2-6 Fc (Vibration) IEC 60068-2-27 Ea (Shock) IEC 60068-2-32 Ed (Free |
| MTBF                     | >50,000Hrs                                                                     |

Mechanical Dimensions

143 x 101 x 44mm(LxWxH)

