



# **RGS100-5P**

## 5-port GbE Unmanaged PoE Switch

Along with the complete commercial product portfolio that offers customers with total network solutions, Zyxel introduces the new RGS100-5P PoE switch with ruggedized design concepts to meet stringent outdoor or harsh network deployment scenarios. The wide operating temperature range ensures reliable performance in adverse environments and expands RGS100-5P's network availability in a wide variety of field applications.



#### Rugged and reliable design for harsh environments

Designed with fanless and IP30 standard metal mechanism, the Zyxel RGS100-5P is able to to deliver excellent thermal controls and withstand dusty environments and can be installed on either a DIN rail or wall mount for efficient use of cabinet space. In addition, wide-ranging operating temperature tolerance allows RGS100-5P to be deployed across a spectrum of harsh environments. Equipped with dual DC power inputs, the RGS100-5P is capable of high-availability operation and resilience under the most demanding conditions. When switching is applied normally in outdoor settings, ESD (electrostatic discharge) and DC surge protection prevent the loss of business revenue and productivity due to damage or fatigue caused by power disturbances.

#### Trouble-free installation and easy extendibility

This rugged unmanaged PoE switch comes with four (4) 10/100/1000 Base-T copper PoE ports and one (1) 100/1000-Base-X SFP fiber interface. The switch also supports the 802.3at PoE plus standard, with each PoE port providing up to 30 W of power to efficiently accommodate the most power-hungry devices. The fiber uplink can extend the network to long-distance nodes up to 40 km (43,744 yards) away for added flexibility.





Wide-ranging operating temperature design from -40°C to 75°C



Fanless design and compact mechanism with IP30 standard



All PoE ports support PoE+ and high PoE power budget up to 120 W



Dual power inputs (12 V - 58 V DC)



Limited lifetime warranty\*

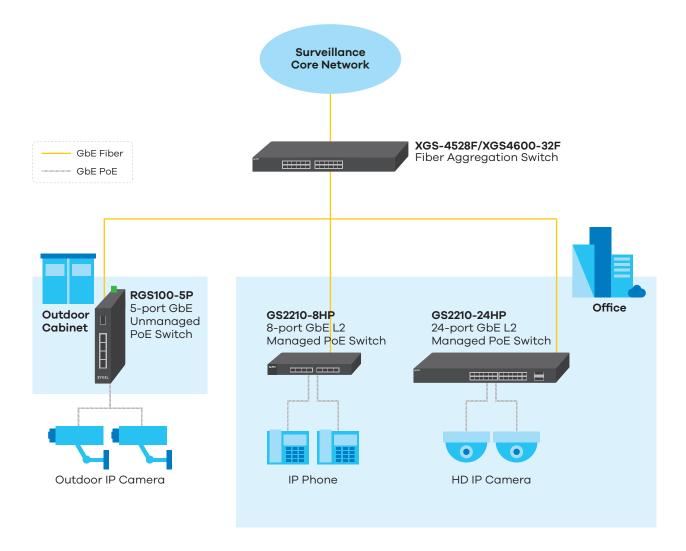
\* Warranty terms, service availability, and service response times may vary from country or region to country or region

Datasheet RGS100-5P

## **Plug-and-Play deployments**

The Zyxel RGS100-5P is able to negotiate the optimal data speed and activate duplex mode automatically with N-Way feature. It can also detect the type of connection to any Ethernet device with support for auto-MDI/MDI-X. Broadcast storm protection can easily be activated via DIP switch. Plug-and-play makes deploying the RGS100-5P hassle-free for any application or scenario.

# **Applications Diagram**



# **Specifications**

| Model                         |                                             | RGS100-5P                                                      |   |   |              |  |           |  |  |
|-------------------------------|---------------------------------------------|----------------------------------------------------------------|---|---|--------------|--|-----------|--|--|
| Product name                  |                                             | 5-port GbE Unmanaged PoE Switch                                |   |   |              |  |           |  |  |
|                               |                                             |                                                                |   |   |              |  |           |  |  |
|                               |                                             |                                                                |   |   | ZYXEL        |  |           |  |  |
|                               |                                             |                                                                |   |   | Switch class |  | Unmanaged |  |  |
|                               |                                             |                                                                |   |   | Port Density |  |           |  |  |
|                               |                                             | Total port coun                                                | t | 5 |              |  |           |  |  |
| 100/1000 Mbps PoE             |                                             | 4                                                              |   |   |              |  |           |  |  |
| Gigabit SFP                   |                                             | 1                                                              |   |   |              |  |           |  |  |
| Performance                   |                                             |                                                                |   |   |              |  |           |  |  |
| Switching capacity (Gbps)     |                                             | 10                                                             |   |   |              |  |           |  |  |
| Forwarding rate (Mpps)        |                                             | 7.44                                                           |   |   |              |  |           |  |  |
| Packet buffer (byte)          |                                             | 0.25 M                                                         |   |   |              |  |           |  |  |
| MAC address to                |                                             | 2 K                                                            |   |   |              |  |           |  |  |
| Jumbo frame (I                | byte)                                       | 9 K                                                            |   |   |              |  |           |  |  |
| Power                         |                                             |                                                                |   |   |              |  |           |  |  |
| Input                         |                                             | Dual power input 12 V - 58 V DC                                |   |   |              |  |           |  |  |
|                               |                                             | (PoE/PoE+ requires minimum 48/54 V DC)                         |   |   |              |  |           |  |  |
| Max. power consumption (watt) |                                             | 125                                                            |   |   |              |  |           |  |  |
|                               | r budget (watt)                             | 120                                                            |   |   |              |  |           |  |  |
| Physical Specifications       |                                             | 004 4070 400/445 4.00 5.47                                     |   |   |              |  |           |  |  |
| Item                          | Dimensions (WxDxH)(mm/in.)                  | 29.1 x 107.3 x 139/1.15 x 4.22 x 5.47                          |   |   |              |  |           |  |  |
| Packing                       | Weight (kg/lb.)  Dimensions (WxDxH)(mm/in.) | 0.5/1.1                                                        |   |   |              |  |           |  |  |
|                               |                                             | 70 x 177.8 x 205/2.76 x 7 x 8.07                               |   |   |              |  |           |  |  |
| Included good                 | Weight (kg/lb.)                             | 0.7/1.54                                                       |   |   |              |  |           |  |  |
| Included accessories          |                                             | <ul><li>Wall mount kit</li><li>DIN-rail mounting kit</li></ul> |   |   |              |  |           |  |  |
| Green Feature                 |                                             | - Dire Toll Mounting Ric                                       |   |   |              |  |           |  |  |
| Fanless                       |                                             | Yes                                                            |   |   |              |  |           |  |  |
| Environmental Specifications  |                                             |                                                                |   |   |              |  |           |  |  |
| Operating Temperature         |                                             | -40°C to 75°C/-40°F to 167°F                                   |   |   |              |  |           |  |  |
|                               |                                             | 5% to 95% (non-condensing)                                     |   |   |              |  |           |  |  |
| Storage                       | Temperature                                 | -40°C to 85°C/-40°F to 185°F                                   |   |   |              |  |           |  |  |
| environment                   | Humidity                                    | 5% to 90% (non-condensing)                                     |   |   |              |  |           |  |  |
| MTBF (hr)                     |                                             | 568,430                                                        |   |   |              |  |           |  |  |
| Heat dissipation (BTU/hr)     |                                             | 426.25                                                         |   |   |              |  |           |  |  |
|                               |                                             |                                                                |   |   |              |  |           |  |  |

Acoustic noise (dBA)

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#### **Features**

#### **Standard Compliance**

- IEEE 802.3 10BASE-T Ethernet
- IEEE 802.3u 100BASE-TX Ethernet
- IEEE 802.3ab 1000BASE-T Ethernet
- IEEE 802.3z 1000BASE-X
- IEEE 802.3af PoE
- IEEE 802.3at PoE Plus
- IEEE 802.1p Class of Service (CoS) prioritization
- Full-duplex and half duplex operation with IEEE 802.3x flow control and backpressure
- Store and forward
- N-way auto-negotiation

#### **Layer 2 Features**

- Jumbo frame support up to 9 K
- Automatic MDI/MDIX support
- Auto address learning
- Non-blocking architecture Wirespeed throughput
- Support power consumption mode
- No power guard-band function
- Multicast/Broadcast/Flooding Storm Control per system basis enable/ disable

#### Industrial Case/Installation

- Slim IP30 metal case protection
- DIN rail and wall mount design
- Dual power design
- Supports lightning surge protection:
  - Ethernet port: 2KV
  - Power input: 2KV
- Supports ESD protection (Air/ Contact): 8KV/6KV
- Supports EFT protection: 2KV
- -40°C to 75°C operating temperature

### **Accessories**

## **Transceivers (Optional)**

| Model            | Speed   | Connector | Wavelength                   | Max. Distance    | DDMI |
|------------------|---------|-----------|------------------------------|------------------|------|
| SFP-1000T        | Gigabit | RJ-45     | -                            | 0.1 km (109 yd)  | -    |
| SFP-SX-D         | Gigabit | LC        | 850 nm                       | 0.55 km (601 yd) | Yes  |
| SFP-SX-E         | Gigabit | LC        | 850 nm                       | 0.55 km (601 yd) | Yes  |
| SFP-LX-10-D      | Gigabit | LC        | 1310 nm                      | 10 km (10936 yd) | Yes  |
| SFP-LX-10-E      | Gigabit | LC        | 1310 nm                      | 10 km (10936 yd) | Yes  |
| SFP-LHX1310-40-D | Gigabit | LC        | 1310 nm                      | 40 km (43744 yd) | Yes  |
| SFP-ZX-80-D      | Gigabit | LC        | 1550 nm                      | 80 km (87488 yd) | Yes  |
| SFP-BX1310-10-D  | Gigabit | LC        | 1310 nm (Tx)<br>1490 nm (Rx) | 10 km (10936 yd) | Yes  |
| SFP-BX1310-E     | Gigabit | LC        | 1310 nm (Tx)<br>1550 nm (Rx) | 20 km (21872 yd) | Yes  |
| SFP-BX1490-10-D  | Gigabit | LC        | 1490 nm (Tx)<br>1310 nm (Rx) | 10 km (10936 yd) | Yes  |
| SFP-BX1550-E     | Gigabit | LC/SC     | 1550 nm (Tx)<br>1310 nm (Rx) | 20 km (21872 yd) | Yes  |







