

Gigabit Ethernet (GbE) Space Switch

HIGHLIGHTS

- Managed Ethernet Switch
- Up to 5 Ethernet Ports
- 10/100/1000 Mbit/s
- For Small Satellite applications



IQ spacecom's new Gigabit Ethernet (GbE) Space Switch for satellite usage is ideal for mounting in small satellite structures and works well together with the XLink transceiver. It is the perfect solution for managing multiple XLink units via Ethernet for standard TM/TC applications, as well as for high-speed data downlinks among other devices with ethernet. It supports up to 5 Ethernet ports/devices and multiple Ethernet protocols.

Effective data connectivity between modules in small satellites is paramount to ensuring mission success. Small satellite systems require high reliability, low complexity, and efficient data transmission, while maintaining small size, weight, and power (SWaP).

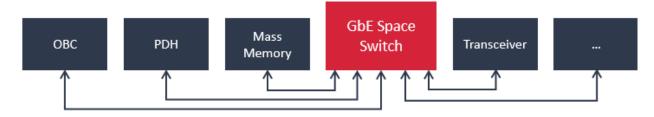
Achieving these goals requires integrating commercial off-the-shelf (COTS) components and standardized protocols from terrestrial commercial applications. The GbE Space Switch incorporates

well-known COTS components and a space-qualified design to ensure a highly reliable architecture. This approach facilitates seamless integration into satellite busses and improves system interoperability.

In addition, space qualification at the system level ensures robustness and resilience of the data connection under demanding space environment conditions.

FEATURES

- Robust aluminium housing
- Extremely rugged, low-profile connectors
- Compact design for optimized integration into small satellites, e.g. MiniSat, MicroSat, or CubeSat
- Design based on components already used in space
- Radiation tolerant



KEY SPECIFICATIONS

Number of ports Up to 5 Ports

Operational mode 10/100/1000 Base-T

DC supply voltage 9-36V 3.5W typ.

Temperature range -20°C ... +60°C

Mass <150 grams

Outer dimensions 90 x 65 x 20 mm³ (<0.2U)

Product specifications may be subject to change without notification.

