

BES100

FAST ETHERNET SWITCH WITH OPTICAL PORT

Application

- ▶ Media conversion between optical and electrical interfaces
- ▶ Switching of Fast Ethernet (100Mbps) traffic
- ▶ Usage in outdoor fiber nodes and in hub/headend locations
- ▶ Overlay of 100 Mbps Ethernet in optical CATV trunking and distribution networks

Features

- ▶ One optical 100Base-FX port
- ▶ Four electrical Ethernet ports with full duplex 10/100Base-TX support and auto-crossover ability
- ▶ Integrated 10/100Mbps QoS Ethernet switch with wire-speed packet switching
- ▶ Auto-negotiation ability to select half/full-duplex and 10Base-T/100Base-TX mode
- ▶ BK modular design (1 unit)
- ▶ LED module status / Optical link status indicator
- ▶ Low power consumption ≤ 3 W
- ▶ Outdoor specified
- ▶ Power supply voltage of 24 Vdc
- ▶ SC/PC optical connectors



Technical Data

Optical Port

Fiber type	Single mode 9/125 μm
Optical connector	SC/PC
Optical wavelengths	TX: 1310 nm, 1550 nm RX: 1260 nm – 1610 nm, 1310 nm, 1550 nm
or	TX: CWDM CH11 - CH18 (1470 nm, 1490 nm, 1510 nm, 1530 nm, 1550 nm, 1570 nm, 1590 nm, 1610 nm) RX: 1260 nm – 1610 nm
Optical receiver input power sensitivity	-35 to -3 dBm, dual fiber -31 to -5 dBm, single fiber BiDi
Average optical output power	-15 to +2 dBm, dual fiber, 1310nm, 1550 nm -5 to 0 dBm, dual fiber CWDM, transmission distance 40 km -3 to +2 dBm, dual fiber CWDM, transmission distance 60 km -15 to +5 dBm, single fiber BiDi, 1310/1550, transmission distance 40 km -15 to +5 dBm, single fiber BiDi, 1550/1310, transmission distance 40 km
Standard compliance	IEEE 802.3u 100BASE-FX

Electrical Ports

Standard compliance	IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX
Mode	Auto-negotiation, auto-crossover, half/full-duplex, integrated four-port store and forward switch
Connector	4 x RJ-45

Protocols and Standards

IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 802.1p, IEEE 802.1Q

Physical and Environmental

Dimensions (Height, Width, Depth)	250 mm x 40 mm x 100 mm (BK-module)
Weight	1.3 kg (2.9 lb)
Power Supply	24 V _{DC} / 0.12 A
Power Consumption	≤ 3 W
Operating Conditions	ETS 300 019-1-3, Class 3.3 operation in not temperature-controlled locations
Operating Temperature Range	-10 °C up to +70 °C
EMC	EN 50 083-2

Ordering Information

BES100-zz-xxxx-yyy

zz	DX SA	Dual fiber Single fiber BiDi
zz-xxxx	DX-1310 DX-1550	Dual fiber, 1310 nm transmit wavelength Dual fiber, 1550 nm transmit wavelength
	DX-CWnn	Dual fiber, CWDM channel nn (11 ... 18) transmit wavelength
	SA-1550 SA-1310	Single fiber BiDi, 1550 nm transmit / 1310 nm receive wavelength Single fiber BiDi, 1310 nm transmit / 1550 nm receive wavelength
yyy	020 040 060 100	transmission distance up to 20 km transmission distance up to 40 km transmission distance up to 60 km transmission distance up to 100 km