

## FIBER MULTIPLEXER



**8 x E1 G.703 +  
Ethernet fiber multiplexer**

**8E1 to Fiber multiplexer**

## ST-2105-FA

### Overview

Spiktel offers 8 E1 + Ethernet - Optical Multiplexer is a high performance optical line transmission equipment, combines 8, ITU-T G.703 compliant standard electrical E1s plus 100 BaseT ethernet signal into an optical data stream for transport over fiber optic pairs. Several transmitter options for different cable types and wave-lengths are available. 1+1 optical path redundancy is offered and available as an option.

The 2105-FA is a fiber media transport for 8xE1 + 1 10/100 BaseT transmission. The BNC model provides unbalanced 75 Ohm coaxial connections while the RJ-45 model provides balanced 120 Ohm connections over twisted pair wiring.

All media converters are available with either multi-mode or single-mode optical transceivers and with connectors for SC, ST, or FC. In single mode they are available in up to 120 km versions reach, which will provide the ability to transmit and receive data using only a single optical fiber pair.

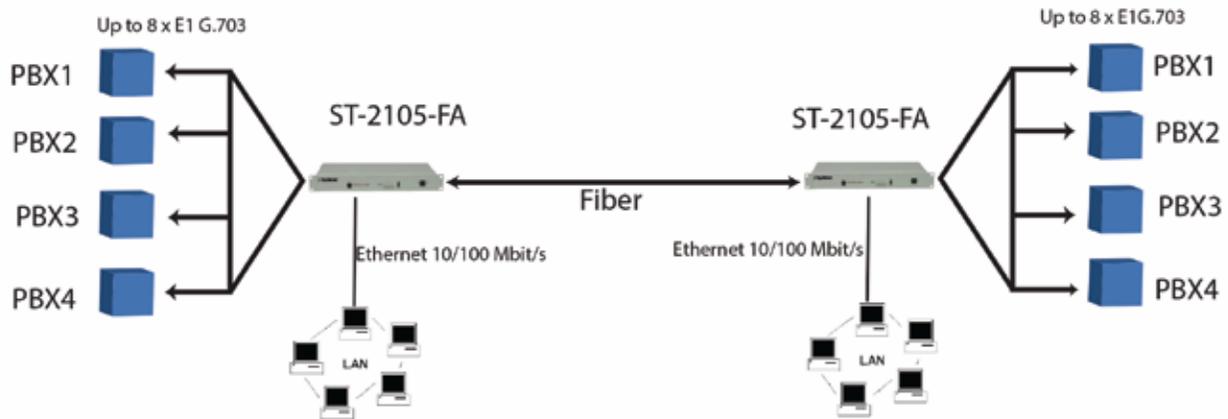
### Features

- \* Can provide up to 8 E1 channels transmission transparently, and 1 10/100M Ethernet data channel.
- \* Compact design (1U - 44mm high) that performs E1 and Ethernet channel multiplexing & de-multiplexing to an optical output
- \* Provide 1 Ethernet interface (support VLAN, flow control, and self- negotiation; full/semi duplex, 10M/100M optional)
- \* Provides visible and audible alarm indication
- \* Local device monitor remote device (2 row LEDs, upper indicate local status, lower indicate remote status)
- \* Orderwire (EOW) channel for end to end installation and maintenance
- \* Power supply option: AC220V, DC-48V, DC+24V (optional).
- \* Provide function of 8 E1 remote loop, fiber local loop, and 1 interface of phone.
- \* Two fiber two direction and single fiber two direction (optional).
- \* Match telecom operation requirement, MTBF above 70,000 hours.
- \* Support both DC and AC power supply.
- \* High reliability, provide install type of 19 inch rack, desktop, hanging, and card.

# Specifications

<b>E1 interface parameter:</b>	<p>Channel capacity: 8 Channels          Bit Rate: 2.048 Mb/s <math>\pm</math>50 ppm          Line Code: HDB3          Line Impedance: 120 Ohm / 75 Ohm          Connector: RJ-45 or BNC          Pulse Shape: ITU-T G.703          Jitter Performance: ITU-T G.823</p>
<b>Ethernet interface:</b>	<p>Interface Rate: 10/100Mbps          Interface character: match IEEE802.3, IEEE802.1 Q          Connector: RJ45</p>
<b>Optical interface parameter:</b>	<p>Optical wavelength: 850/1310nm for multi-mode fiber,          1310/1550nm for single-mode fiber.          Optical interface: SC/FC/ST (Optional)          Transceiver module: &gt; -6dBm          Optical receiver sensitivity: &lt;-36(BER&lt;10)          Receive range: &gt;-30dB          Transmission distance: multi-mode 2 Km, single-mode 20/40/          80 / 120 Km, single fiber          WDM versions available</p>
<b>Power:</b>	<p>DC: -48V (-36 to -72V); +24 V (Optional)          AC: 90 to 260 VAC ; 47 ~ 63Hz          Power Interface: DC power terminal/AC socket          Power Consumption: 10 W maximum</p>
<b>Working environment:</b>	<p>Operating temperature: 0 to 50°C          Storage temperature: -20 to +70°C          Relative humidity: 5% to 90% (25°C no condense)</p>

## Application Diagram



## Ordering Information

Product	Descriptions
2105-FA/ETH-MM	8xE1 and 10/100 Ethernet signal over multi-mode fiber 2km SC/ST
2105-FA/ETH-S20	8xE1 and 10/100 Ethernet signal over single-mode fiber 20km SC/ST
2105-FA/ETH-S40	8xE1 and 10/100 Ethernet signal over single-mode fiber 40km SC/ST
2105-FA/ETH-S80	8xE1 and 10/100 Ethernet signal over single-mode fiber 80km SC/ST
2105-FA/ETH-S120	8xE1 and 10/100 Ethernet signal over single-mode fiber 120km SC/ST

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\* Specs and Pictures of the product can be revised according to R&D

\* Products design in UK.

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