

## MC-FXO-16-SC20A & MC-FXS-16-SC20B

### User Manual



#### 【Product introduction】

MC-FXO-16-SC20A and MC-FXS-16-SC20B are 16CH POTS over fiber converters using the most advanced digital multiplexing communications solutions and fiber optic transmission technology, which can transmit analog and PSTN telephones or Ethernet data signals on a single fiber in real-time synchronization, no distortion, high quality. Plug and play design makes installation easy, no need for field settings and adjustment. Please use FXO unit as a transmitter to connect with PBX analog phone lines and use FXS unit as a receiver to link with your telephone sets or fax machines. We offer Two-year standard warranty.

#### 【Package List】

16 Channel POTS Converter: 1 pair (2 units)  
AC-DC5V 5A External Power Adapter: 2 pieces  
User manual: 1 copy

#### 【Product Features】

- All-digital uncompressed transmission
- PCM Pulse Code Voice 64Kbps per channel
- Clear voice quality, stable and reliable calls
- Industrial design and Support caller ID/Fax
- Power and fiber optic link LED lights indicate the state of equipment
- Low power consumption, low heat and hot swap

#### 【Technical Parameters】

- Telephone Channel: 16
- Phone Connector: 16 x RJ-11 Jack

- Voice bandwidth: 8kHz
- Weighted noise: <63.7dBmop
- Distortion: <1%
- Signal to Noise Ratio: >95db
- Fast Ethernet Port: 1
- Maximum Bandwidth: 10/100Mbps
- Ethernet Connector: RJ45

#### FXS Telephone Mode

- Ring Voltage Peak: AC110 - 150V
- Ringing Voltage: AC90±15V
- Ring Frequency: 22 - 28Hz
- Input impedance: 600Ω
- Return Loss: 20db
- Insertion Loss: -3±0.75dB
- Frequency characteristics: 300~3400Hz(-0.6~+3dB)
- Crosstalk attenuation: ≥65dB

#### FXO Switch Mode

- Ringing Voltage: 35V - 150V
- Ring Frequency: 17 - 60Hz
- Input impedance: 600Ω
- Return Loss: 20dB

#### Optical Interface

- Bit rate: 1.25Gbps±20ppm
- Line code: NRZ+ Scrambler
- Wavelength: 1310nm and 1550nm
- WDM 1310Tx/1550Rx (type A)
- 1550Tx/1310Rx (type B)
- Transmit optical power: >-12dBm
- Receiver sensitivity: <-30dBm
- Fiber connector: SC

#### 【Environmental Requirements】

- Operating Temperature: -30°C~+75°C
- Relative humidity: 0~95% (Non condensing)
- Power Input: AC90-260V to DC5V 5A
- MTBF: ≥100000h
- Dimensions: 485 x 135 x 40mm (W x D x H)
- Net Weight: 1.5Kg
- Power Consumption: ≤10W (Input: DC5V 5A)

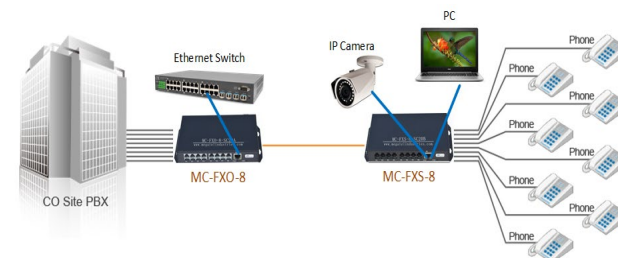
#### 【LED Indicators】

| Name       | LED Indications | Status Descriptions  |
|------------|-----------------|----------------------|
| Power      | Always ON       | Power work normal    |
| Fiber      | OFF             | Fiber doesn't pass   |
|            | ON              | Fiber Link OK        |
| Phone Line | OFF             | Not in use or failed |
|            | ON or Flashing  | Work Normal          |

#### 【Applications】

- ◆ Metro optical broadband network: Telecommunications, network System integration and other data network operators.
- ◆ Communications professional network: Applies to finance, government, oil, railway, electricity, public security, transportation, education and other industry professional networks.
- ◆ Multimedia transmission: Voice, data and integrated transmission.
- ◆ Resistance to harsh environments: Applicable to strong electromagnetic interference, long-distance network under harsh environments.

#### 【Connection Diagram】



#### Ordering Information:

MC-FXO-16-SC20A and MC-FXS-16-SC20B:

Use one single mode fiber, SC and WDM transmission up to 20Km and use one multi-mode fiber and transmission up to 2Km.

**Megatel** Industries Corporation

664 Wagner Court  
North Wales, PA 19454  
USA

Tel: 1-610-239-8812

Fax: 1-215-699-3348

Email: [Support@megatelindustries.com](mailto:Support@megatelindustries.com)  
[www.megatelindustries.com](http://www.megatelindustries.com)