# Electric to Optical Converter
# Model EO12G-100B

MAW249E V2.0

Safety Precautions

***Instruction Manual***

Use of controls or adjustments or performances other than those specified herein may result In hazardous radiation exposure.

**CAUTION**

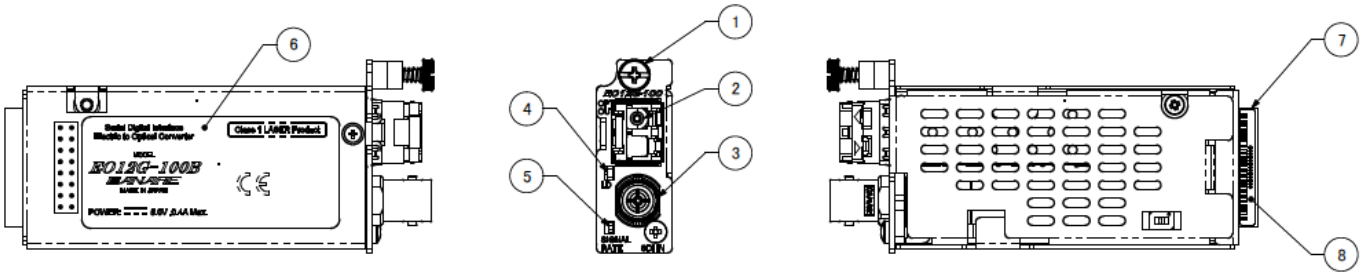
- EO12G-100B Converter is a Class 1 laser product. Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No.50 dated June 24, 2007.
- Do not look into the LC connecter directly.
- Do not block the vents. The blocking raises an internal temperature and may cause damages.
- Ensure that dust caps are attached to LC connector and BNC connector for each when not in use.

## General Description

- An electric to optical converter for 12G-SDI, 6G-SDI, 3G-SDI, HD-SDI, SD-SDI and DVB-ASI(multi rate, multi format) video transmission
- Cable equalizer and re-clocker equipped
- Capable of receiving and transmitting the pathological test pattern (SMPTE RP-178, RP-198 Check Field Test Pattern)
- Recommended to install in Canare's 161UPSC / 6PSC converter platform

## Outline & Functions

**[Left Side]** **[Front]** **[Right Side]**




| | |
|---|---|
| 1) Captive Screw | To fix this product to the platform. |
| 2) LC Connector | For connection with SM optical fiber. |
| 3) BNC Connector | For connection with 75Ω coaxial cable to input the signal. |
| 4) Status LED (LD) | Light on when laser operating.<br>Blink on and off when abnormal laser power is detected. |
| 5) Status LED (SIGNAL RATE) | Blue light on when 12G-SDI or 6G-SDI signal is input.<br>Green light on when 3G-SDI or HD-SDI signal is input.<br>Yellow light on when SD-SDI or DVB-ASI with 270Mbps signal is input. |
| 6) ID Label | Describes the model name, rating, certifications, and so on. |
| 7) DIN Connector(16-pin) | For the power supply and status signal outputs. |
| 8) Connector Label | Production No. described. |

## Mounting the Converter in the Power Unit

1. Install this product into the mounting slot of the platform* by gripping the captive screw as shown in Figure 1.
   Note: platform*: 6PSC, 161UPSC
2. Align the captive screw to correspond to the screw hole in the platform, and tighten securely with a Philips head screw driver to secure this product.
3. Connect coaxial cable to this product 's BNC connector.
4. Connect optical fiber to this product 's LC connector.


Figure.1 EO converter installation

Note) Be sure to keep the ferrule tip of the plug clean as shown in Figure 2.
If a fiber-optic connector becomes dirty, signal loss may be increased.

Caution) Be sure to only use EO12G-100B combined with OE12G-101B.
If combining with other series of converters to use, it can cause poor performance in data transmission.

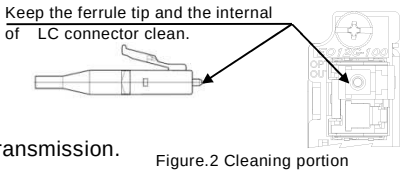



Figure.2 Cleaning portion

## Specifications

Transmission Rate with re-clocking :
11.88Gbps, 11.88/1.001Gbps, 5.94Gbps, 5.94/1.001Gbps, 2.97Gbps, 2.97/1.001Gbps, 1.485Gbps, 1.485/1.001Gbps, 270Mbps

| | |
|---|---|
| Light Emission Wavelength | : 1310nm (DFB-LD) |
| Optical Fiber | : 1-core single mode |
| Fiber-Optic Connector | : LC type |
| Laser Product Class | : Class1, IEC60825-1 |
| Maximum Light Emission Level | : 0dBm |
| EMC | : FCC part15 Subpart B Class A |
| | : EN55032 Class A, EN55024 |

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|---|---|
| Operating Temperature | : 0℃ to 40℃ (no condensation) |
| Storage Temperature | : -40℃ to 85℃ |
| Power Source | : +5VDC ±5% |
| Power Consumption | : Max. 2.0W |
| Weight | : Approx. 95g |
| Dimensions | : 78.4mm(D)×43.4mm (H)×17mm (W) (excluding connectors) |
| Accessories | : LC connector dust cap ..... 1 |
| | : BNC connector dust cap ..... 1 |



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