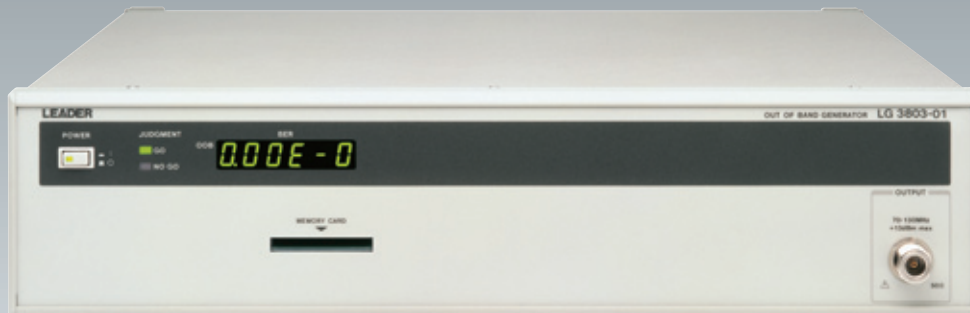


## LG 3803-01 Out-of-Band Generator



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## GENERAL

The LG 3803-01 is a companion/accessory instrument for the LG 3803(S1 version) 8VSB/QAM Signal Generator. When the 2 instruments are connected, the LG 3803(S1 version)/3803-01 pair becomes capable of providing QPSK signals compliant to USA CATV Out Of Band Standard (ANSI/SCTE 55-1, 55-2).

The testing features of the LG 3803(S1 version) are extended to CATV Out of Band testing; modulator, C/N generator and up-converter are all provided in one package. As a result, BER measurements can be easily and effectively performed and digital CATV capable tuners can be fully tested (in-band and out-of-band testing).

## FEATURES

Out-Of-Band system BER measurements can be performed by connecting the LG 3803-01 to the LG 3803(S1 version) 8VSB/QAM Signal Generator via LAN. Measurement functions are controlled and displayed on the LG 3803(S1 version).



LG 3803-01 is combined with LG 3803(S1 version)

## SPECIFICATIONS

## LG 3803-01

### Modulator Section

#### Modulation System

**QPSK conforming to Out Of Band (ANSI/SCTE 55-1, 55-2) standards**

**Symbol Rate:** 1.024 Msps  
(ANSI/SCTE 55-1: Normal)  
1.024 Msps  
(ANSI/SCTE 55-1: Alternative)  
0.772 Msps  
(ANSI/SCTE 55-2: GRADE A)  
1.544 Msps  
(ANSI/SCTE 55-2: GRADE B)

### RF Signal Generator

#### Frequency

**Range:** 70 to 130 MHz  
**Resolution:** 1 kHz

#### Output

**Range:** -100 to +13 dBm (into 50 Ω)  
**Resolution:** 0.1 dB  
**Impedance:** 50 Ω

### Input/Output Signal Sources

#### Internal Signal

**Pseudo Random Signal:** PN23

#### FREQ STD Input

**Input Connector:** BNC  
**Input Impedance:** 50 Ω  
**Input Level:** 0.8 Vp-p  
**Input Frequency:** 10 MHz

#### FREQ STD Output

**Output Connector:** BNC  
**Output Impedance:** 50 Ω  
**Output Frequency:** 10 MHz

#### BER Serial Input

**Input Connector:** BNC  
**Input Level:** LVTTTL 3.3 V

### BER Counter Section

#### Input Section

**Input Connector:** Serial input connector

#### GO/NO-GO Function

**Threshold Settings:** Upper and lower limits of BER  
**GO/NO-GO Indication:** Displays GO/NO-GO on the screen.

### C/N Generator Section

**C/N Variable Range:** 0 to 20 dB  
**Setting Resolution:** 0.1 dB  
**On/Off:** Selectable

### External Interface

#### Memory Card Interface

**Memory Card:** Compact flash card (CFA TYPE-I)

#### ETHER Interface

**Specifications:** 10BASE-T, 100BASE-TX

#### Serial Interface

**Connector:** 9-pin D-sub  
**Specifications:** RS232C

### Display Panel

**Items Displayed:** BER measurement value, GO/NO-GO results  
**Display Element:** LED

### Environmental Conditions

**Operating Temperature:** 0 to 40 °C  
**Operating Humidity:** ≤85 % RH (without condensation)  
**Spec-Guaranteed Temperature:** 10 to 35 °C  
**Spec-Guaranteed Humidity:** ≤85% RH (without condensation)  
**Operating Environment:** Indoor use  
**Operating Altitude:** Up to 2000 m  
**Overvoltage Category:** II  
**Pollution Degree:** 2

### Power Requirements

**Voltage:** 90 to 250 VAC, 50/60 Hz  
**Power Consumption:** 40 W max.

### Dimensions, Weight

426 (W) x 99 (H) x 450 (D) mm  
7 kg approx.

### Accessories

Power cord ..... 1  
LAN cable (Cross) ..... 1  
BNC cable ..... 1  
Instruction manual ..... 1

### ■ LG 3803-01 Rear Panel

