



Genexis CATV modules

CATV-103, CATV-302, CATV-332

Datasheet



CATV-103 module for XG

Genexis CATV-103 module supports GPIO based ON/OFF control in combination with XG6846, as well as extended I2C based control functions in combination with XG6846B or XGX. The CATV module will automatically detect which control interface is supported. It supports automatic gain control and weak input signal.

SC/APC receptacle input connector and F-connector for RF output. Designed for integration in the Genexis XG Series.

CATV-302 module for EG Fibertray

Genexis CATV-302 is a compact CATV module with monitoring functions and RF on/off switch.

CATV-302 provides a SC/APC receptacle connector for fiber input and both F-connector and IEC-connector for RF output signal. Designed for integration in the Genexis EG Series fibertrays.

CATV-332 module for EG Fibertray

Genexis CATV-332 is a compact CATV module with monitoring functions and RF on/off switch.

CATV-332 provides a SC/APC receptacle connector for fiber input and both F-connector and IEC-connector for RF output signal. Designed for integration in the Genexis EG Series fibertrays.

Key features

- 45 MHz - 900 MHz frequency range
- F-female connector for CATV RF output
- AGC (automatic gain control) supported
- Simplex SC / APC Connector
- Optical input power monitoring
- RF output level monitoring
- housing made of >99% recycled plastics

Key features

- 47 MHz - 1000 MHz bandwidth
- F-female and PAL connector and for CATV RF output
- High RF output level
- AGC (automatic gain control) supported
- Optical input power monitoring
- RF output level monitoring

Key features

- 47 MHz - 1000 MHz bandwidth
- F-female and PAL connector and for CATV RF output
- High RF output level
- 2 low pass RF filter included
- AGC (automatic gain control) supported
- Optical input power monitoring
- RF output level monitoring



Product features and specifications

Genesis CATV modules

CATV-103 features

45 MHz - 900 MHz bandwidth
 F-female (PAL connector CATV RF output)
 AGC (automatic gain control)
 Optical input power monitoring
 Simplex SC / APC receptacle
 +12V power input voltage
 Weak signal alarm LED
 >99% recycled plastics
 Automatic detection GPIO or I2C control
 For all products in XG Series (i.e., XG6846, XG6846B, XGX)

General specifications

Operating temperature 0 - +70 °C
 Storage temperature -40 - +85 °C
 PSU voltage 12 VDC
 Power consumption typ. 1.8 W

CATV Receiver specifications

Frequency bandwidth 45 - 900 MHz
 Optical wavelength
 · min.: 1100 nm
 · typ.: 1550 nm
 · max.: 1600 nm
 Optical input power -9 to 0 dBm
 RF output level 80 ± 2.5 dBuV
 Up tilt 1 - 4 dB
 Frequency response flatness max 2 dB
 CNR min 47 dB@ -8 dBm
 CTB / CSO max -57 dBc
 RF output impedance 75 Ω
 Output return loss max -10 dB

GPIO control features

Power ON / OFF
 Weak signal alarm

I2C control features

RF output ON / OFF
 Input signal good indication
 AGC enable / disable
 Optical input power monitoring
 RF output level monitoring

CATV-302 features

47 MHz - 1000 MHz bandwidth
 F-female (PAL connector CATV RF output)
 AGC (automatic gain control)
 Optical input power monitoring
 RF output level monitoring
 Weak signal alarm LED
 Power ON / OFF control with ModeStay memory
 Metal housing
 Simplex SC / APC receptacle
 I2C control interface
 +12V power input voltage
 RoHS compliance

General specifications

Operating temperature 0 - +70 °C
 Storage temperature -40 - +85 °C
 PSU voltage 12 VDC
 Power Consumption typ. 2 W

CATV Receiver specifications

Frequency bandwidth 47 - 1000 MHz
 Optical wavelength
 · min.: 1290 nm
 · typ.: 1550 nm
 · max.: 1580 nm
 Optical input power -10 to -2 dBm
 RF output level min 80dBuV@AGC 47MHz, OMI 3.5%
 Up tilt 3 - 7 dB
 Frequency response flatness -1.5 - +1.5 dB
 CNR 48 dB
 CTB / CSO 60 / 65 dBc
 RF output impedance 75 Ω
 Output return loss 14 dB
 Threshold optical power min. -10dBm

CATV-332 features

47 MHz - 1000 MHz bandwidth
 F-female (PAL connector CATV RF output)
 AGC (automatic gain control)
 Optical input power monitoring
 RF output level monitoring
 Weak signal alarm LED
 Power ON / OFF control with ModeStay memory
 Metal housing
 Simplex SC / APC receptacle
 I2C control interface
 +12V power input voltage
 RoHS compliance
 2 low pass RF filter included

General specifications

Operating temperature 0 - +70 °C
 Storage temperature -40 - +85 °C
 PSU voltage 12 VDC
 Power Consumption typ. 2 W

CATV Receiver specifications

Frequency bandwidth 47 - 1000 MHz
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 Up tilt 2 - 7 dB
 Frequency response flatness -1.5 - +1.5 dB
 CNR 48 dB
 CTB / CSO 60 / 65 dBc
 RF output impedance 75 Ω
 Output return loss 14 dB
 Threshold optical power min. -10dBm