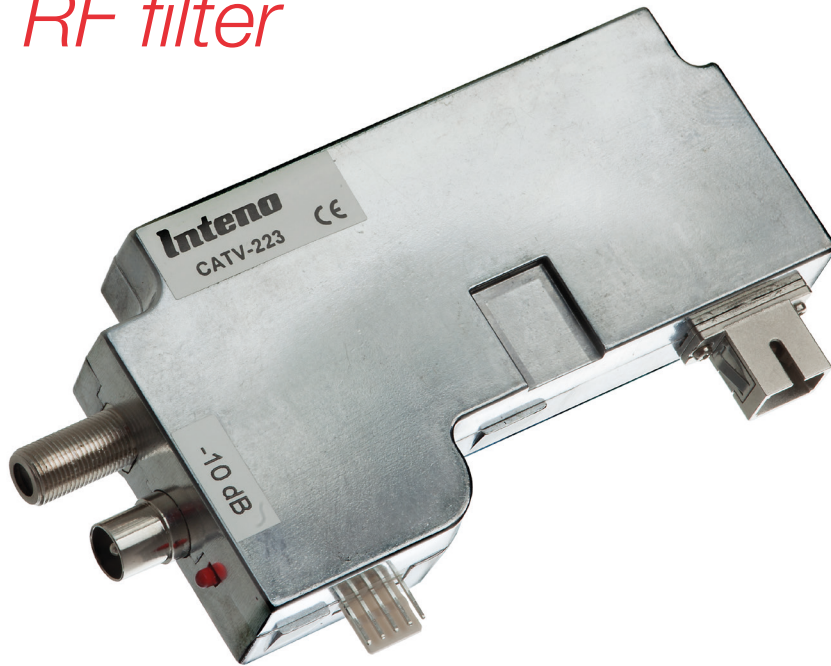


Inteno CATV-223

An overlay CATV module with monitoring functions and low pass RF filter



Inteno CATV-223 is a compact CATV module with monitoring functions and RF on/off switch. CATV-223 provides a SC/APC receptacle connector for fiber input and both F-connector and IEC-connector for RF output signal. CATV-223 has two built in low pass RF filters, enabling up to three RF bands. Designed for integration in the Inteno FG500 FTTH RGW.

Features

- 47MHz~1000MHz bandwidth.
- F-female and PAL connector and for CATV RF output
- High RF output level
- -10dB RF output attenuation over PAL connector
- Low pass RF filter included.
- AGC supported.
- Optical input power monitoring.
- RF output level monitoring.
- Weak signal alarm LED.
- Power On / Off control with Mode-Stay memory.
- Aluminum Alloy metal shield.
- Simplex SC / APC receptacle Connector.
- Video RF signal output with 75 Ohm impedance.
- I2C control interface.
- +12V power input voltage.
- RoHS compliance



Inteno

Absolute Maximum Ratings

Parameter	Symbol	Min	Typ.	Max	Units	Note
Storage Temperature	Tstg	-40	-	85	-	-
Operating Temperature	Topr	0	-	70	-	Case temperature
Power Supply Voltage	Vcc	10.8	12	13.2	V	-

CATV Receiver Specifications (0 ° C < Topr < 70 ° C, Vcc=12V, 75Ω system)

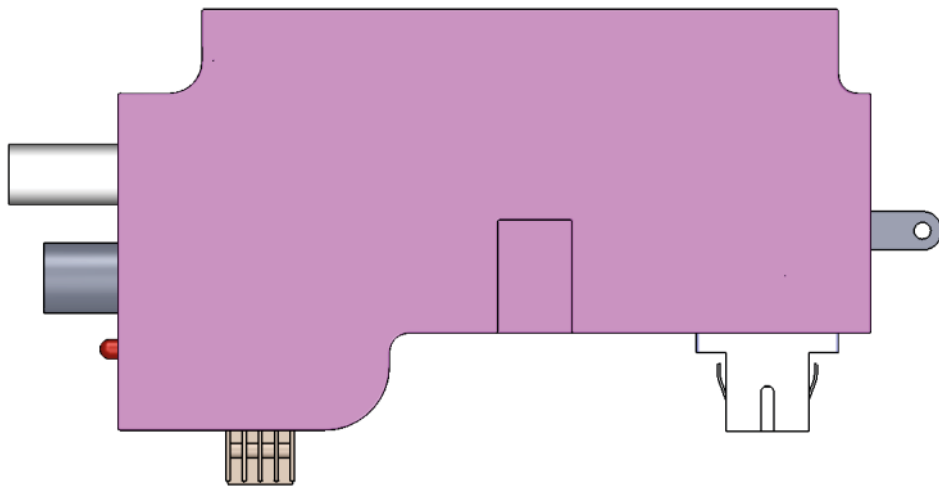
Parameter	Symbol	Min	Typ.	Max	Units	Note
Frequency bandwidth-1	f1	47	-	431	MHz	Filter-1
Frequency bandwidth-2	f2	47	-	591	MHz	Filter-2
Frequency bandwidth-3	f3	47	-	1000	MHz	Full band
Optical Wavelength	λ_c	1290	1550	1610	nm	-
Optical Input Power	PIN	-10	-	-2	dBm	1
1st RF output level	-	72	78	80	dBuV	2, 3
2nd RF output level	-	62	68	70	dBuV	4
Attenuation (filter-1)	-	50	-	-	dB	-
Attenuation (filter-2)	-	45	-	-	-	-
CNR	-	48	-	-	dB	5, 6
CTB/ CSO	-	60	65	-	dBc	7
Output Return Loss	-	14	-	-	dB	8
RF Output impedance	Ro	-	75	-	Ohm	-
Power Consumption	-	-	2	-	W	-
Threshold Optical power	-	-10	-	-	dBm	-
	-	-	-	-12	dBm	LED On

Notes:

1. AGC working range is -2~-8dBm.
2. At 47MHz, OMI=3.5% with insertion loss from filter, F-female connector.
3. The minimum RF output level is 76 dBuV and 72 dBuV @ -8~-2 dBm and -10~-8 dBm optical input power range respectively.
4. At 47MHz, OMI=3.5% with insertion loss from filter. PAL female connector(IEC 169-2).
5. The minimum RF output level is 76 dBuV and 72 dBuV @ -8~-2 dBm and -10~-8 dBm optical input power range respectively.
6. 60ch, at -5dBm.
7. 60ch.
8. 47MHz, -1dB/octave



Inteno



Pin Definition

From TOP to Down:

1. Vin (+12V)
2. GND
3. SCL (I2C)
4. SDA (I2C)
5. GND



Inteno