Fiber Optical RF Unit (for U)

Optical CATV Receiver

The LiComm OCR-2600 series is designed to provide very wide bandwidth of 47 ~ 2610 MHZ and high RF output power. The series supports 77 analog CATV channels or combination of analog and digital, such as HDTV channels, in addition to satellite broadcasting channels.
The receiver is a single-mode fiber pigtailed module featuring a low-noise, impedance-matched broadband photodiode and RF amplification. The OCR exhibits excellent distortion performance with values well above standards over the retire bandwidth and temperature specification. The OCR monitors LOS(Loss of signal) alarm status.

Features

- 1290nm ~ 1610nm wavelength
- Perfect for Broadband Cable TV(CATV) applications.
- Wide Optical Input Window(-2dBm to -10dBm) @ 1310/1550nm
- Excellent distortion characteristics for high linearity
- Low noise and low power consumption
- Small package with single-mode fiber pigtail
- Compact, Very Cost Effective
- Internal proprietary impedance matching circuitry(75Ω)
- LOS alarm output
- ROHS Compliant Products

Applications

- Receiver module for optical CATV network in HFC and FTTx nodes
- CATV and Satellite broadcasting system
- Video overlay in passive optical networks(PON)

LiComm
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Electrical / Optical characteristics

Parameter	Min	Typ	Max	Unit
Input optical power	-10		-2	dBm
Wavelength	1290	1550	1610	nm
Responsivity (@1550nm)		0.9	-	A/W
Optical input return loss*	-	-	-40	dB
Supply voltage	-	+5	-	V_{DC}
Power consumption	-	-	1.75	w

* Optical connector type : SC/APC connector

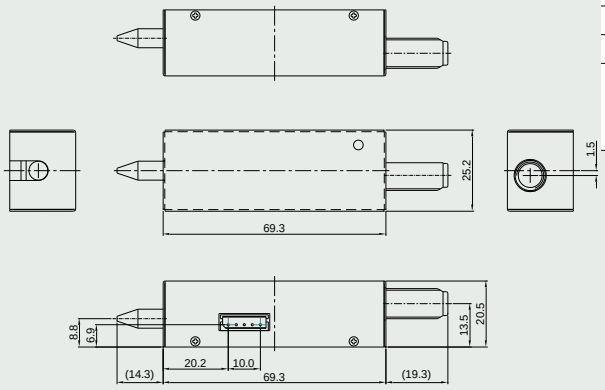
RF Characteristics

Parameter	Min	Typ	Max	Unit
Bandwidth	47	-	2610	MHz
Frequency ripple(47MHz ~ 2610MHz)*	-	-	4	dBp-p
Output RF signal level***	19	21	23	dBmV
Output connector	F-type Female			
Output impedance	-	75	-	ohm
Output return loss	-		-10	dB
Carrier to Noise Ratio(CNR)**	43	-	-	dB
Composite Second-Order(CSO)***	58	-	-	dBc
Composite Triple Best(CTB)***	60	-	-	dBc

* Peak to valley
** 77NTSC channel loading, OMI=3.5%, -8dBm Optical Input,
*** 77NTSC channel loading, OMI=3.5%, -5dBm Optical Input

Outline Drawing

(The dimensions are in millimeters)



Ordering Information

OCR - 2600 - XX - XX

- **Band Width** 47~2610MHz
- **Gain Control** AG: AGC, FX: Fixed gain
- **Connector** SA:SC/APC, FA:FC/APC

Pin Configurations

Pin No	Description
1	PD LOS Alarm
2	IPM
3	RF Output Disable
4	GND
5	+5V

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