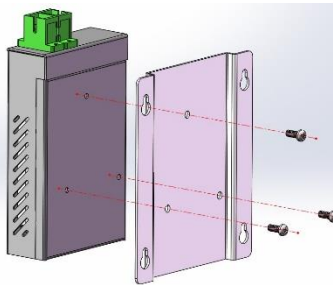


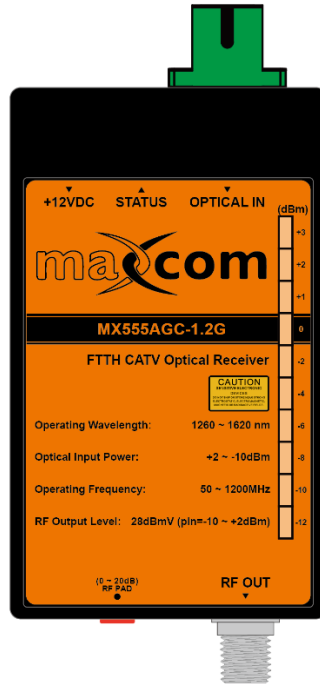


MX555AGC-1.2G

Mini Optical Receiver with AGC



Available with optional
Wall Mount Bracket



The Maxcom MX-555-AGC series CATV optical receiver supports a bandwidth of 47~1200MHz, with an AGC feature. It will provide a typical output level 28 dBmV \pm 1.0dB when the input optical receive power is +2~-8dBm. There is also a high output +40 dBmV version available. Works great for Residential, Business, Hospitality and Government applications. As an RF/ Cable TV optical receiver unit, it provides a high index, and low power consumption with exceptional performance at an exceptionally low cost.

The Maxcom MX-555-AGC series adopts high sensitivity receiving tube and special low noise matching circuit. With a 3.8% OMI, full channel bandwidth, -8dBm optical power receiving, the CNR will continue to reach a high index 45dB. The MX-555-AGC incorporates optical AGC circuitry, realizing high performance automatic level control (ALC). The MX555 is equipped with a convenient built in LED display that will indicate the optical input power between -12 and +3 dBm.

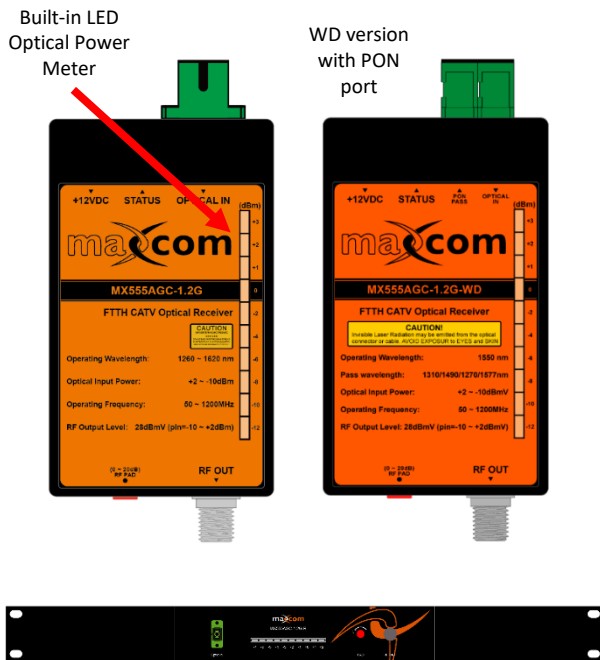
Available in Small Form Factor (desk top style) or as a 19" Rackmount



Available Model Numbers and Options:

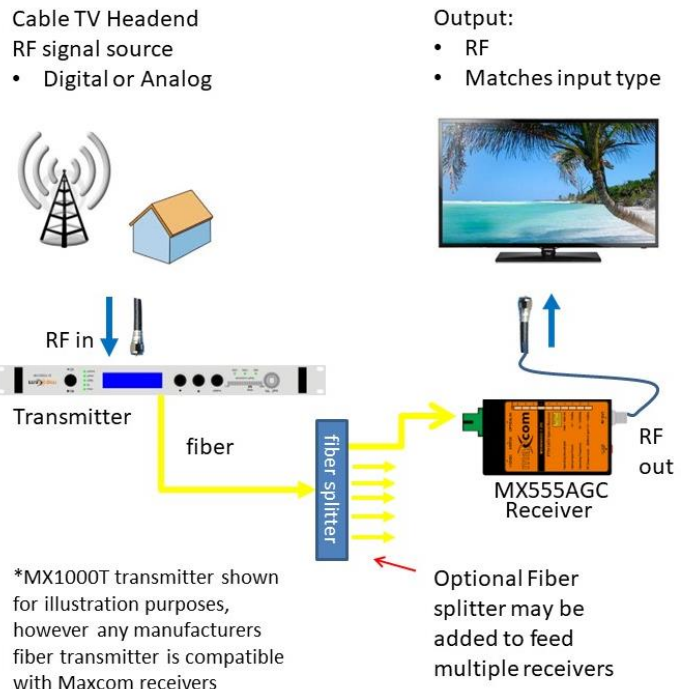


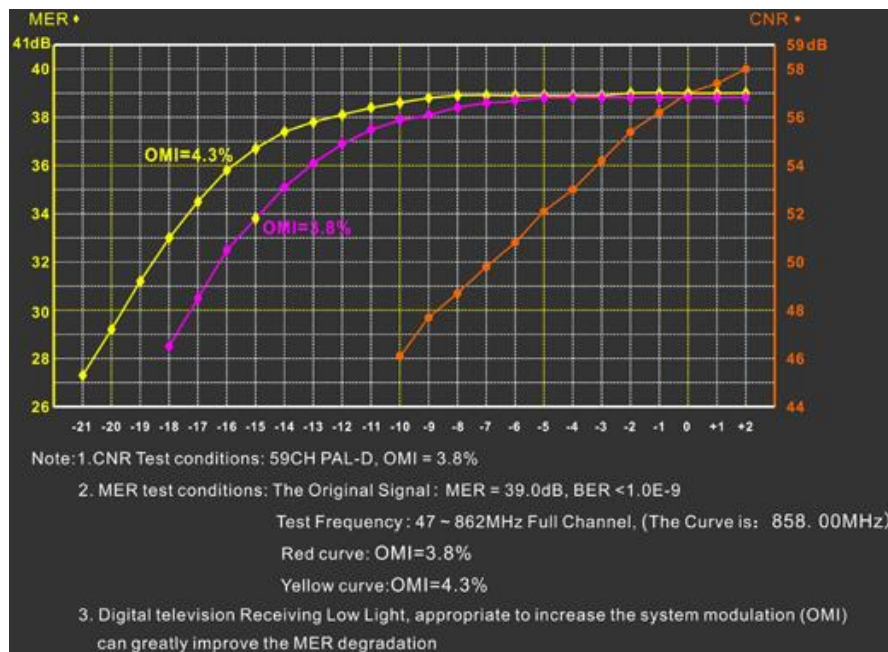
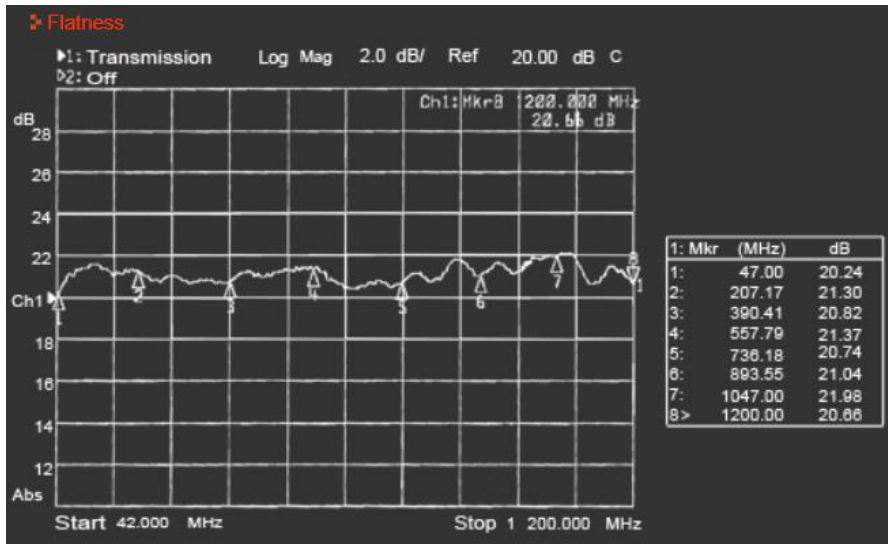
- MX555AGC.1.2G** 47~1200MHz Optical receiver with AGC +28 dBmV output, with LED optical power display, includes standard PS – Mini Desk top style
- MX555AGC.1.2G-R** 47~1200MHz Optical receiver with AGC +28 dBmV output, with LED optical power display, includes standard PS – 19" 1RU Rack mount style
- MX555AGC.1.2G-WD** 47~1200MHz Optical receiver with AGC +28 dBmV output, with built-in PON port (PON port passes G-PON and XGS-PON wavelengths of 1270, 1310, 1490, 1577nm) with LED optical power display, includes standard PS – Mini Desk top style
- MX555AGC.1.2G-HO** High Output 47~1200MHz Optical receiver with AGC +40 dBmV output, with LED optical power display, includes standard PS – Mini Desk top style
- MX555AGC.1.2G-R-HO** High Output 47~1200MHz Optical receiver with AGC +40 dBmV output, with LED optical power display, includes standard PS – 19" 1RU Rack mount style
- MX-C-Wall** Wall mount bracket for Mini Desk top style
- MX-BP12VAA8** Battery Pack, holds (8) 1.5V AA batteries. Used to power MX555 series receivers



19" 1RU rack mount version

maxcom RF / CATV over Fiber





DIGITAL TV TEST DATA (Pin=+2.0dBm~-20.0dBm)

Pin (dBm)	Vo (dBmV)	MER	BER	
			POST	PRE
+2.0	30.5	38.2	<1.0E-9	<1.0E-9
+1.0	30.2	38.5	<1.0E-9	<1.0E-9
+0.0	30.3	38.8	<1.0E-9	<1.0E-9
-1.0	30.9	38.9	<1.0E-9	<1.0E-9
-2.0	30.9	38.9	<1.0E-9	<1.0E-9
-3.0	30.5	38.7	<1.0E-9	<1.0E-9
-4.0	29.3	38.6	<1.0E-9	<1.0E-9
-5.0	29.9	38.5	<1.0E-9	<1.0E-9
-6.0	20.2	38.5	<1.0E-9	<1.0E-9
-7.0	20.2	38.4	<1.0E-9	<1.0E-9
-8.0	28.4	38.2	<1.0E-9	<1.0E-9
-9.0	26.0	38.1	<1.0E-9	<1.0E-9

Pin (dBm)	Vo (dBmV)	MER	BER	
			POST	PRE
-10.0	23.1	37.7	<1.0E-9	<1.0E-9
-11.0	22.4	37.4	<1.0E-9	<1.0E-9
-12.0	19.5	37.2	<1.0E-9	<1.0E-9
-13.0	18.0	36.6	<1.0E-9	<1.0E-9
-14.0	16.0	36.1	<1.0E-9	<1.0E-9
-15.0	13.5	35.0	<1.0E-9	<1.0E-9
-16.0	11.4	33.4	<1.0E-9	<1.0E-9
-17.0	9.3	31.5	<1.0E-9	<1.0E-9
-18.0	7.5	29.4	<1.0E-9	4.9E-9
-19.0	5.4	27.3	<1.0E-9	1.3E-6
-20.0	3.9	26.1	<1.0E-9	1.3E-5

Note: Test condition using MX555AGC-1.2G (28dBmV version):

1. Test Signal: MER: 38.0(dB), BER: <1.0E-9

2. Channel Load: <10CH Analog TV、Digital 64 QAM

Performance			Index	Supplement
Optic feature	CATV work wavelength	(nm)	1260~1620	Option WDM PON Filter/port available
	Channel Isolation	(dB)	≥40	1550 & PON (if equipped with PON port)
	Receiving power	(dBm)	+2 ~ -8	(+2~ -8 AGC range)*best performance
			+2 ~ -18	(+2~-18 Digital)*performance degraded if less than -10dBm
	Optical return loss	(dB)	≥55	
RF feature	Bandwidth	(MHz)	47~ 1200	
	Flatness	(dB)	≤± 1.0	47~ 1200MHz
	Output level * *AGC mode operates between +2 to -8 dBm	(dBmV)	>28	Analog TV (Pin=+2.0~-8.0dBm)
			>22	Digital TV (Pin= -15dBm)
	Output Level of "HO" High Output version	(dBmV)	>40	Analog TV (Pin=+2.0~-8.0dBm)
			>34	Digital TV (Pin= -15dBm)
	ALC(AGC)character(ΔVo)	(dB)	≤±1.0	Pin=+2.0~-8.0dBm
	Output level adjust	(dB)	0 ~ 18	MGC (via manual POT)
	Return loss	(dB)	≥14	47~ 1200MHz
	Output impedace	(Ω)	75	
	Output port count		1	
RF connector		F-Female		
Analog TV Link feature	Test channel	CH	59CH(PAL-D)	NTSC/80CH
	OMI	(%)	3.8	
	CNR1	(dB)	54	Pin= -2dBm
	CNR2	(dB)	45.3	Pin= -10dBm
	CTB	(dB)	≤-63	Pin:0~ -10dBm
	CSO	(dB)	≤-60	Pin:0~ -10dBm
Digital TV Link feature	OMI	(%)	4.3	
	MER	(dB)	≥36	Pin: +2 to -10dBm
			≥30	Pin: -18dBm
BER	(dB)	<1.0E-9	Pin : -10.0~+2.0dBm	
General feature	Power supply	(V)	DC+12V	±1.0V
	Power Consume	(W)	≤5.5	+5VDC, 250mA
	Operating temperature	(°C)	-20 ~ +55	
	Operating relative Humidity	(%)	5 ~ 95	
	Size	(mm)	59×98×23	

Note* 1. The Original Signal : MER = 39.0dB, BER <1.0E-9
2. Test Frequency : The Curve is: 858.00MHz, OMI = 4.3%
Optimal optical input range is +2 to -8 dBm for best performance