



AUTOMATIC **GAIN** OPTICAL RECEIVERS

mod. **COR-STC**

Condominium Optical Receiver with **AGC**



ULTRA WIDE RANGE OPTICAL INPUT POWER -1 to -15 dBm

WIDE RANGE OPTICAL WAVELENGTH: 1.280/1.610 nm (can be Filtered)

OPTICAL **AGC** FOR CONSTANT RF OUT LEVEL

SAT-TV-CATV: 47/2.350 MHz

2 RF OUT LEVELS: 75/95 dB μ V

**ADVANCED
TECHNOLOGY**

FOR PROFESSIONAL
CABLE & BROADBAND
NETWORKS



APPLICATIONS & MAIN FEATURES

- Automatic Optical Gain Control
- Ultra low Noise Optical Receiver
- Ultra Wide Range Optical Input Power
- Optical input power LED indication
- FTTH Fiber to the Home distribution
- Combined Optical & RF distribution
- Analog & Digital SAT-TV-CATV Condominium Receiver
- High RF out level & Low IMD distortion
- Constant RF out level from -1 to -15 dBm (± 0 to -16 max) Optical input, thanks to the microprocessor controlled AGC
- Adjustable RF Output levels
- Compact indoor Box

TECHNICAL SPECIFICATIONS

OPTICAL

- Optical Wavelength : 1.280/1610 nm (typ. 1310 or 1550)
- Optical Input Range : -1 to -15 dBm (max ± 0 to -17)
- Optical Return Loss : 45 dB
- Optical Connector : SC/APC
- Optical Input power indication : Led: Green, Yellow, Red

RF SAT, TV & CATV

- Frequency Range : 47/2.350 MHz
- Receiver Noise Input : 5 ± 1 pA $\sqrt{\text{Hz}}$
- * RFOut Level : TV & CATV: 75 ± 3 dBuV
- * RFOut Level with "AMP-STC95" : TV & CATV: 95 ± 3 dBuV with -20 dB Test Point output
- RF flatness TV & CATV : $\pm 1,5$ dB typ, 2 max
- RF flatness SAT : $\pm 1,5$ dB typ, 2,5 max
- RF Impedance : 75 Ω
- RF Output connector : male "F"
- RF Return Loss TV & CATV : 12 dB, typ. 14 max
- RF Return Loss SAT : 10 dB, typ. 12 max
- Operating temp. Range : -20 to +60°C
- Storage temperature Range : -40 +85°C

* Stable RF OUT level with Optical AGC, from -1 to -15 dBm. The SAT RF input level is normally set in the Optical TX 10 dB lower than TV level, the RF level is measured on a single Channel and single Transponder, the TV RF level Output is for Cenelec 42 Standard.

DIAGNOSTIC LEDs INDICATIONS

- OPTIC INPUT POWER MONITORING:
 - Too High : RED Led Flashing (over -1 dBm)
 - Normal : GREEN Led (from -1 to -15 dBm)
 - Low : YELLOW Led (from -15 to -17 dBm)
 - Too low : RED Led (below -17 dBm)
- 12 Vdc PSU : Green LED



RF AMPLIFIER "AMP-STC95"

- Frequency Range : 47-2.350 MHz
- RF Gain : 28 dB adjustable
- RF Out level : $95 \text{ dB} \pm 3 \text{ dBuV}$
- Test point : -20 dB
- RF impedance : 75 Ω
- RF output connector : male "F"



GENERAL

- PSU Voltage : 12 Vdc (max 18)
- PSU connector diameter : 2,5 / 5,5
- Power Consumption "AOR-STC95" : 140 mA
- Environment : indoor use
- Dimensions : 11 x 15 x 5 cm
- Fixing : Wall
- Weight : 300 g

mod. **COR-STC 95**, 16 TO 32 USERS, CONDOMINIUM FIBER & COAX DISTRIBUTION EXAMPLE

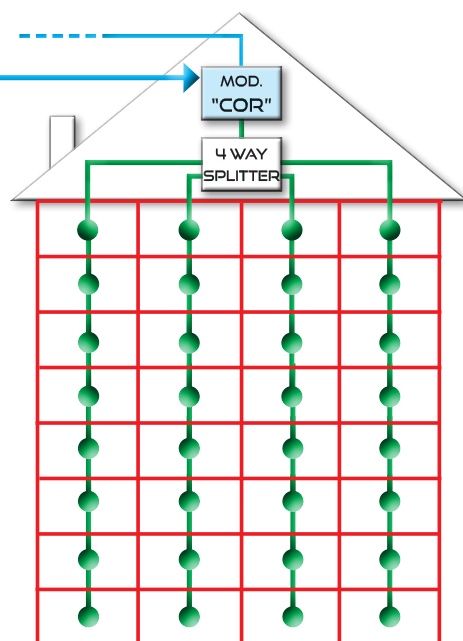
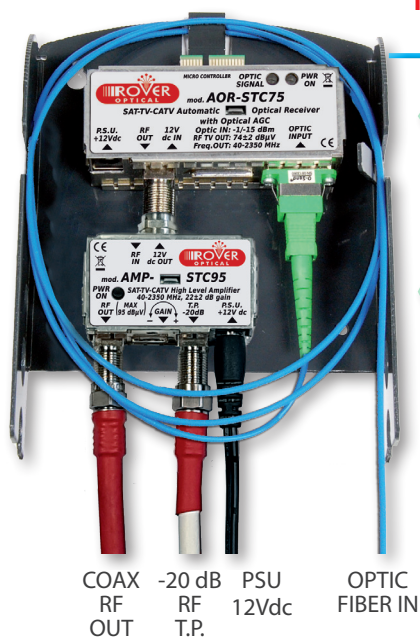
The mod. "COR-STC95" contain:

N. 1 mod. AOR-STC75

SAT-TV-CATV Automatic Optical Receiver module with Optical AGC

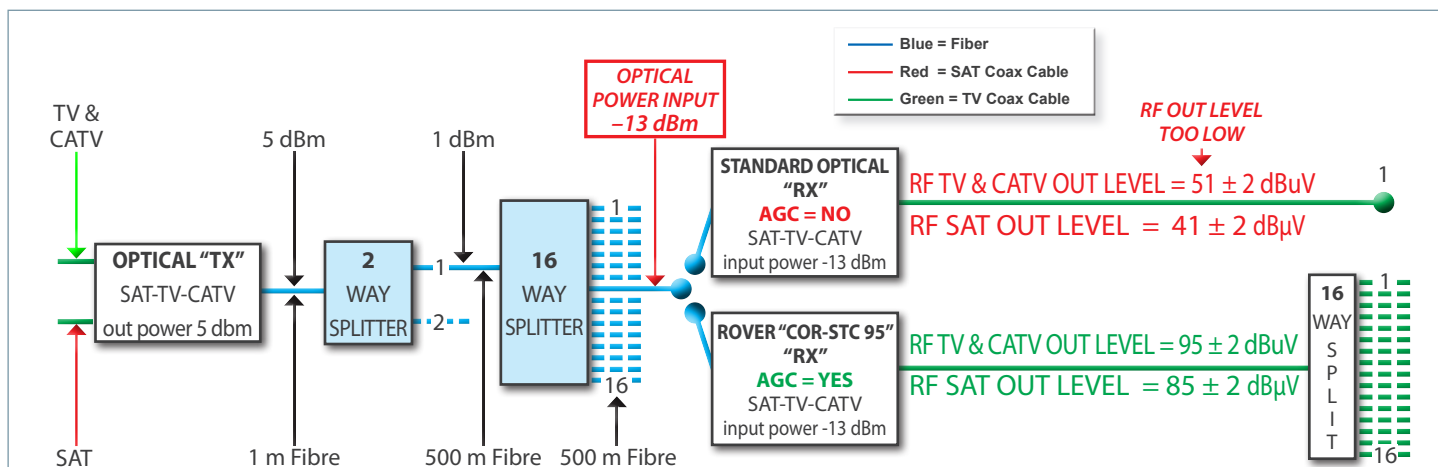
N. 1 mod. AMP-STC95

SAT-TV-CATV High Level Amplifier module 47-2.350 MHz, 28 dB gain adjustable



WHY IS "AGC" SO IMPORTANT IN THE OPTICAL RX?

Because for each 1 dB variation of the Optical input power at the RX, we have 2 dB variation at the RF Output Level at your Optical RX, here an example:



Example: Medium distance (1 Km) FTTH Fiber Optic distribution System for 32 large Villas or Condominiums.
The Standard Optical "RX" without AGC, don't have enough RF level for one socket, while ROVER "COR-STC95" Optical RX with AGC, maintains the same RF output level of 95 dBuV, for any range of Optical Input levels, to feed all 16 (or 32) sockets.

ORDERING CODE DEFINITION

STC = SAT - TV - CATV

COR =
CONDOMINIUM
OPTICAL RX

COR - STC - 95

75 = 74 ±2 dBuV RF OUT
95 = 95 ±2 dBuV RF OUT

ORDERING MODEL / CODE EXAMPLE

MODEL / CODE	DESCRIPTION	APPLICATION
COR-STC95	AGC High level Condominium Optical Receiver, 95 ±2 dBuV, constant output RF level, from -1 to -15 dBm Optical power INPUT	SAT-TV-CATV Condominium distributions HFC

COR-STC V3,1 6-11-17



Product
made in Italy by
Rover Broadcast.com



Specifications and features are subject to change without notice.

RO.VE.R. Laboratories S.p.A.
Via Parini, 2 - 25019 Sirmione (BS) Italy
info@roverinstruments.com • www.roverbroadcast.com