



AUTOMATIC **GAIN** OPTICAL RECEIVERS

mod. **AOT-STCxxx**

Apartment Optical Receiver/Termination 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

RF OUT LEVELS: 75 dB μ V

**ADVANCED
TECHNOLOGY**

FOR PROFESSIONAL
CABLE & BROADBAND
NETWORKS



APPLICATIONS & MAIN FEATURES

- Analog & Digital SAT-TV-CATV apartment Terminal/Receiver
- FTTH Fiber to the Home distribution
- Ultra low Noise Optical Receiver/Termination
- Ultra Wide Range Optical Input Power
- Optical input power LED indication
- Constant RF out level from -1 to -15 dBm (± 0 to -18 dBm max) Optical input power, thanks to the microprocessor controlled AGC
- High RF out level & Low IMD distortion
- Compact and elegant Apartment Box

TECHNICAL SPECIFICATIONS

OPTICAL

- Optical Wavelength : 1.280/1610 nm (can be filtered)
- Optical Input Range : - 1 to -15 dBm (max ± 0 to -18)
- Optical Input power indication : Led: Green, Yellow, Red, Red flashing
- Optical Return Loss : 45 dB
- Optical Connector : SC/APC

RF SAT, TV & CATV

- Frequency Range : 47/2.350 MHz
- Receiver Noise Input : 5 ± 1 pA $\sqrt{\text{Hz}}$
- * RFOut Level : TV & CATV: 74 ± 2 dBuV
- RF flatness TV & CATV : $\pm 1,5$ dB typ, 2 max
- RF flatness SAT : $\pm 1,5$ dB typ, 2,5 max
- RF Impedance : 75Ω
- RF Output connector : male "F"
- RF Return Loss TV & CATV : 14 dB typ.
- RF Return Loss SAT : 12 dB typ.
- Operating temp. Range : -20 to $+60^\circ\text{C}$
- Storage temperature Range : -40 to $+85^\circ\text{C}$

* Stable RF OUT level with Optical AGC, from -1 to -15 dBm. The SAT RF input level is normally set at the Optical TX 10 dB lower than TV level.

DIAGNOSTIC LEDs INDICATIONS

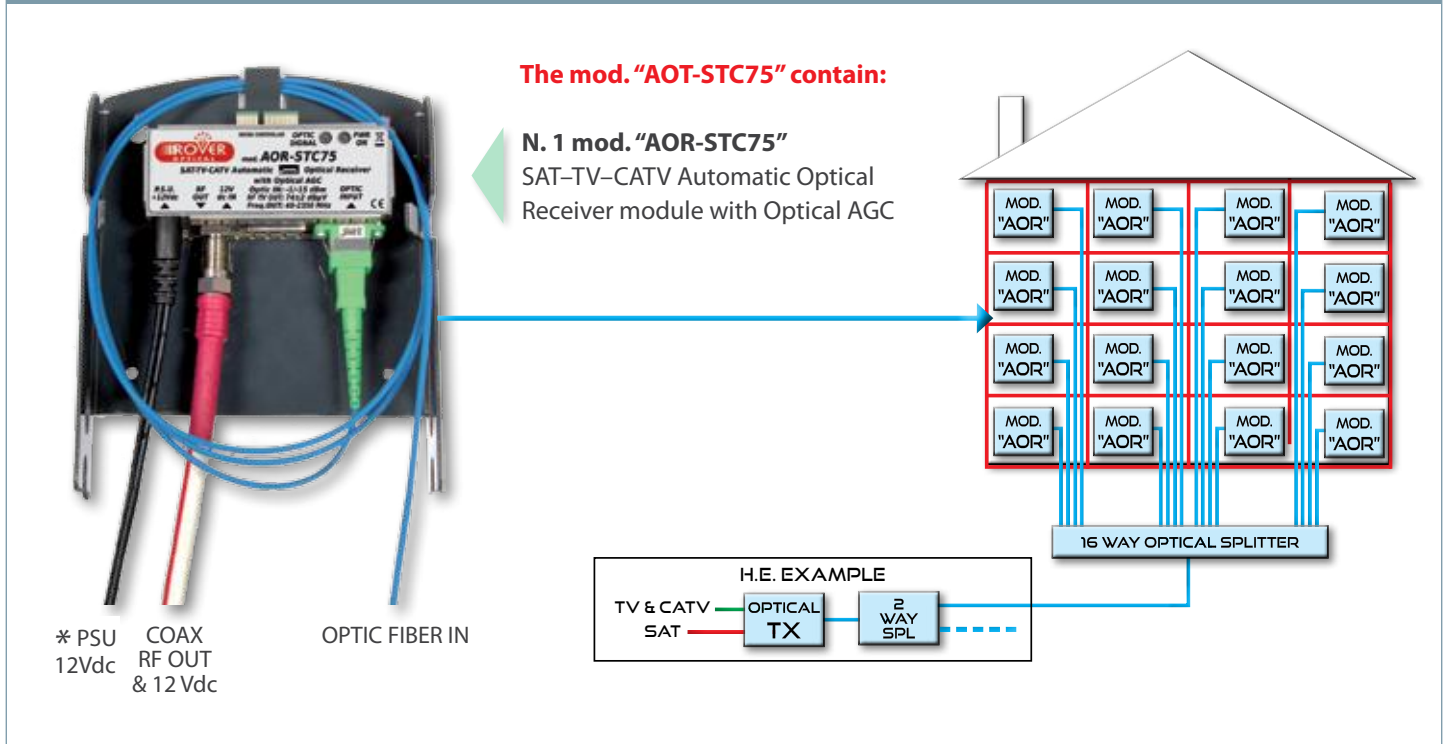
- OPTIC INPUT POWER MONITORING:
 - Too High : RED Led Flashing (over -1 dBm)
 - Normal : GREEN Led (from -1 to -15 dBm)
 - Low : YELLOW Led (from -15 to -17 dBm)
 - Too low : RED Led (below -17 dBm)
- 12 Vdc PSU : Green LED



GENERAL

- PSU Voltage : 12 Vdc (max 18)
- PSU connector diameter : 2,5 / 5,5
- Power Consumption : 110 mA
- Environment : indoor use
- Dimensions : 11 x 15 x 5 cm
- Weight : 250 g with box
- Fixing : Wall

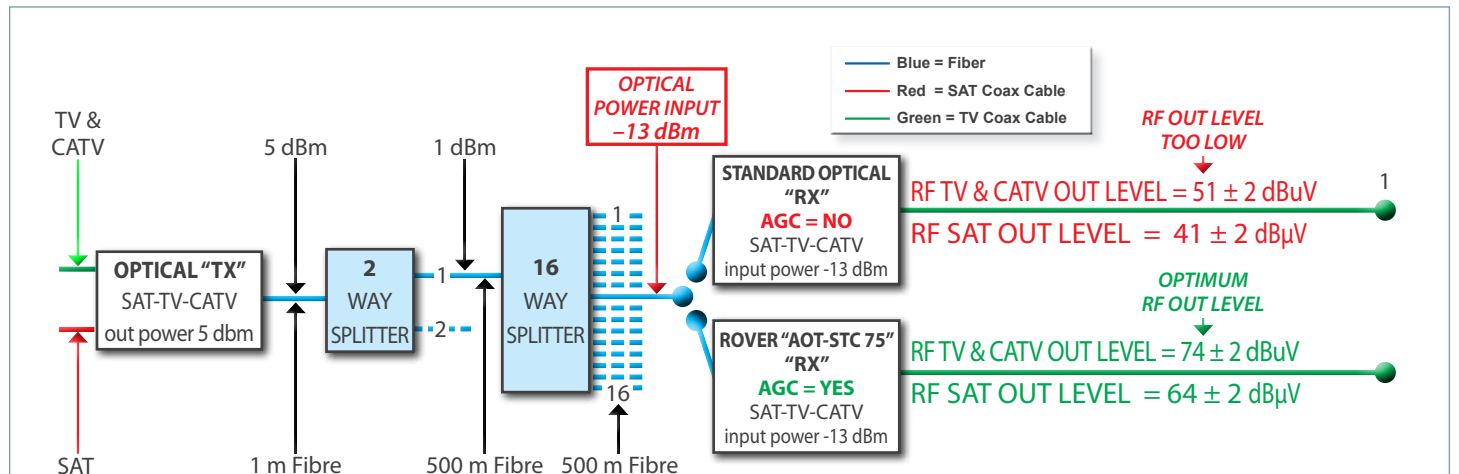
mod. **AOT-STC 75** 16 to 32 USERS FTTH (Fiber To The Home) APARTMENT INSTALLATION EXAMPLE



* The Optical Receiver power supply may also come from the Set Top Box, via RF coax cable.

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

AGC is important because 1 dB variation of the Received Optical Input Power can cause a 2 dB RF level output variation at the RX.



Example: Medium distance (1 to 5 Km) FTTH Fiber Optic distribution System for large Villas or Condominiums.
The Standard Optical "RX" without AGC, don't have enough RF level for one socket, while ROVER "AOT-STC75" Ultra Wide Range Optical RX with AGC, maintains the same RF output level of 75 dBuV, for all range of Optical Input power, without Saturation.

ORDERING CODE DEFINITION

STC = SAT - TV - CATV

AOT =
AUTOMATIC
OPTICAL
TERMINATION



ORDERING MODEL / CODE EXAMPLE

MODEL / CODE	DESCRIPTION	APPLICATION
AOT-STC-75XXX	AGC Apartment Optical Receiver/Termination, 74 ±2dBu, Constant Output RF level, from -1 to -15 dBm Optical power INPUT	SAT-TV-CATV Condominium FTTH distributions

AOT-STC V5,1 6-11-17



Product
made in Italy by
Rover Broadcast.com



Specifications and features are subject to change without notice.

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