

# Product info

## Opto Multi-Switch for SAT + TER

| The prime device for Multi SAT reception plants FTTB/H

### TOM 16 M – Opto Switch Master, 16 way

Art. No. 307696

### TOM 08 M – Opto Switch Master, 8 way

Art. No. 307697

### TOM 16 S – Opto Switch Slave, 16 way

Art. No. 307698

### TOM 08 S – Opto Switch Slave, 8 way

Art. No. 307699

The Opto Multi-Switch combines the optical-to-coaxial Re-converter with an integrated Multi-switch in a sophisticated way. Thus all SAT-IF bands can be chosen from each coaxial output by the switch signals 13/18 V, 0/22 KHz and DiSEqC 1.0 provided from the directly connected SAT receiver.

The Opto Switch Master provides also a coax DTT/DAB/FM signal diplexed onto each output when it is fed into the optical transmitter TOU 232 SA (IRS 1).

The Opto Switch Master is the standalone base unit for reception of one SAT position and terrestrial broadcast signals (TER).

Two versions available - 16 output and 8 output.

Extension of reception for 2, 3, or 4 satellites by plug Opto Switch Slaves units on the Master.

Common features:

- Compatible with the Optical LNB TOL 32 / TOL 64 or Optical IRS 1 which includes TER (DTT, DAB, FM)
- Very compact form factor and reliable design on base of the new chip set in ASIC technology

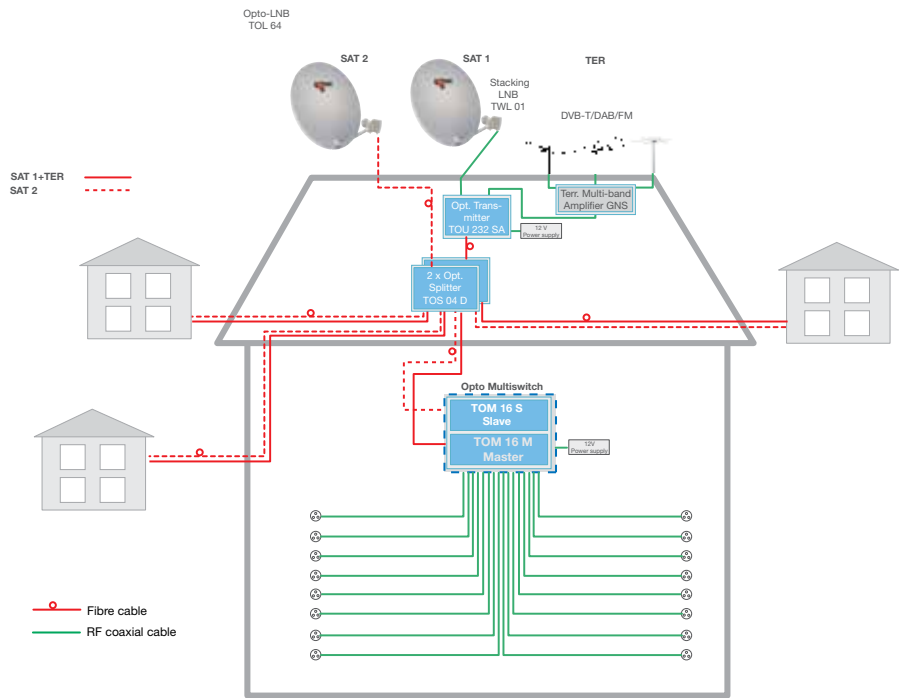


- Ideal for SAT FTTH/FTTB networks because of easy and space-saving installation without any coaxial patch cables between re-converter and multi-switch
- Easy upgrade for reception of more than one satellite position.
- Included desk top PSU only for Master necessary
- Capability of Frequency Morphing by software to adapt to other SAT standards in world

Attention: Please insert an optical attenuator TFA (5/10/15) dB in the fibre line if the optical attenuation of the passive Optical network (PON) is less than 10 dB

**Technical Data** - see page 2

## Application example



## Technical Data

Type		TOM 16 M / TOM 08 M	TOM 16 S / TOM 08 S
Item number		307696 / 307697	307698 / 307699
Functionality		Master 16 way / 8 way	Slave 16 way / 8 way
Optical Input			
Input Power with TOL 64 or TOU 232	dBm		-14...-3
Wavelength	nm		110...1650
Input RF frequency range, vertical	GHz		0.95 – 3.0
Input RF frequency range, horizontal	GHz		3.4 – 5.45
Terrestrial frequency range, DVB-T	MHz		470...854
Terrestrial frequency range, DAB	MHz		174...241
Terrestrial frequency range, DTT	MHz		88...108
Input connector			FC/PC
Output SAT on ports		1...16 / 1...8	
Horizontal High Band (input: 4.4 to 5.45 GHz)	MHz	1100-2150, > 15,5 V 22 kHz	
Vertical High Band (input: 1.95 to 3.0 GHz)	MHz	1100-2150, < 14,5 V 22 kHz	
Horizontal Low Band (input: 3.4 to 4.4 GHz)	MHz	950-1950, > 15,5 V	
Vertical Low Band (input: 0.95 to 1.95 GHz)	MHz	950-1950, < 14,5 V	
Selection of satellite by DiSEqC		1.0	
Current from receiver	mA	<35	
Impedance, nominal	Ohm	75	
Return loss	dB	>10	
Automatic Gain Control (AGC)	dB	30	
Output Level SAT	dBµV	79	
Output TER on ports		1...16 / 1...8	
Terrestrial frequency range, DVB-T	MHz	470...854	
Terrestrial frequency range, DAB	MHz	174...240	
Terrestrial frequency range, DTT	MHz	87...108	
Output Level DTT (6 multiplexes)	dBµV	ca. 69	
Common Data		16 x F-f / 8 x F-f	
Output connectors		<1.2	
Current consumption (16 way based on 4 satellite configuration)	A	11...20	
Supply voltage	V	100...240 / +12V, 3,5A	from Master
Mains desk top adapter (PSU)	VAC	UART /WinXP, Win7, Linux,	
Interface for frequency morphing (GUI)		M-OS	
Operating temperature	°C	-12...+50	-20...+50
Weight	kg	1.65 (incl. PSU)	1.15
Dimensions of an unit	mm	227 x 138 x 67.5	227 x 95 x 67.5
Dimensions 2 satellites	mm		227 x 220 x 67.5
Dimensions 3 satellites	mm		227 x 303 x 67.5
Dimensions 4 satellites	mm		227 x 385 x 67.5