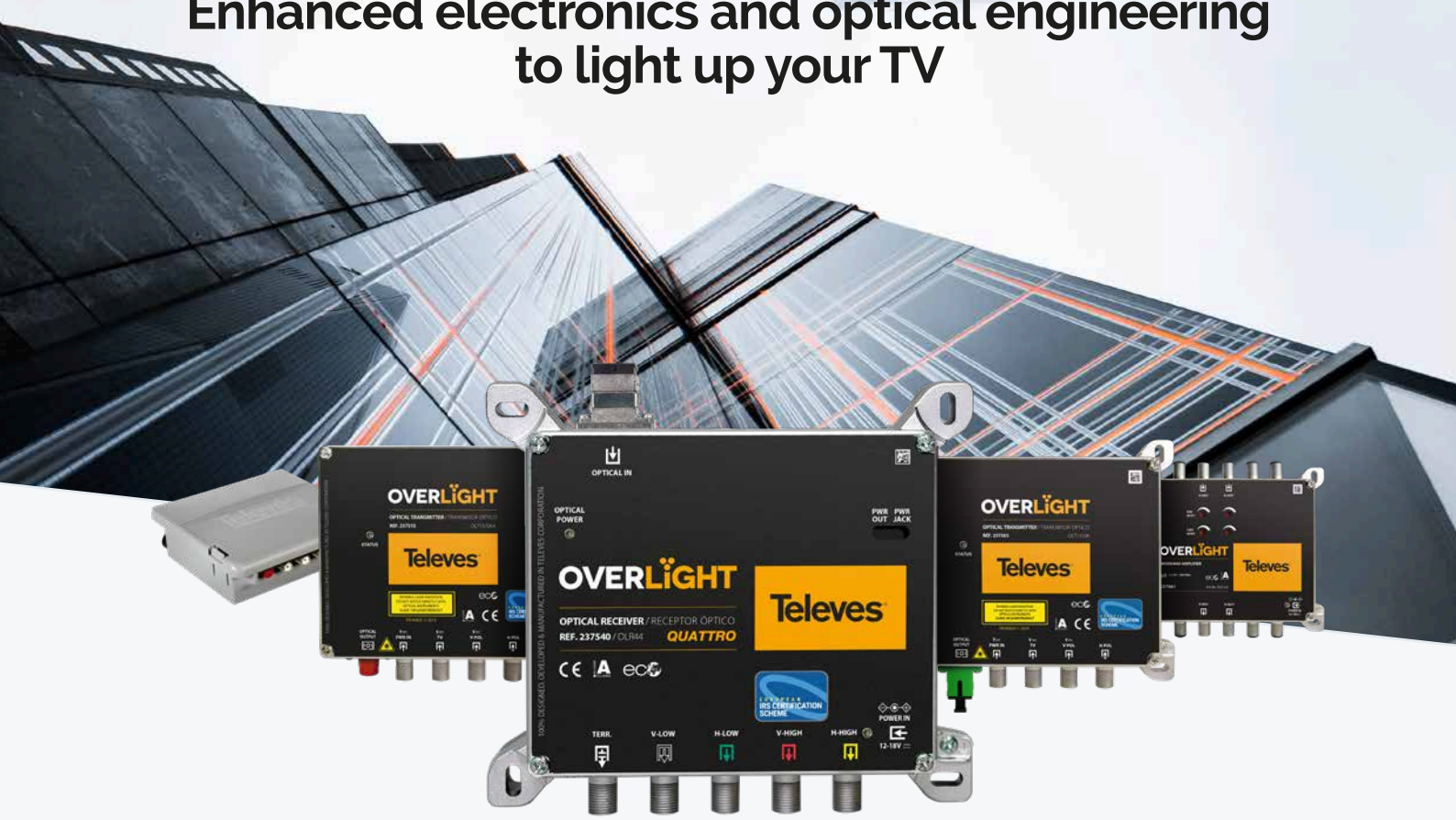
EDITION: DECEMBER 2022

OVERLIGHT

Enhanced electronics and optical engineering to light up your TV



SATELLITE AND TERRESTRIAL TV DISTRIBUTION OVER FIBER OPTICS

With the Overlight series you will get an integrated TV installation with all the services through a single optical fiber, **reducing the number of antennas and devices in the installation without losing the quality of the terrestrial and satellite TV signal**.

Thanks to the low losses of the fiber and the high distribution rate, it is possible to provide TV services to housing estates, blocks of apartments, hotels and campsites, residences, and other FTTX solutions.

- SAT / TERR — Satellite and Terrestrial Distribution
- Optimized electronic design
- GPON compatible
- MADE IN TELEVES — 100% Made in Televes

OVERLIGHT

MADE IN Televes

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Why choose Overlight?

- The Overlight series **is suitable for all types of FTTx installations**,such as residential areas, leisure and entertainment areas, hotels, campgrounds and residences.
- With a **high output level and a splitting ratio of 64 users**, it is capable of reaching large collective installations.
- It allows the option of **optical amplification** to increase the number of users while **maintaining signal quality**.
- Satellite and terrestrial distribution is carried out through **a single optical fiber, which reduces installation costs and materials**.
- Optimized electronic performance resulting in **low loss and a balanced end-to-end TV signal** for all DTT and satellite services.
- It includes both **outdoor and indoor installation options** for greater flexibility in deployment.
- **Compatible with GPON deployments**, to incorporate TV services in the Hospitality sector.
- **100% European design, quality and manufacture**.

Advantages of fibre optics

- Enables deployments with minimal attenuation and maximum performance, even over long distances.
- Unlike coaxial cables, it does not suffer electromagnetic interference.
- Offers great flexibility for the installer and users.
- Allows reduction in the size of the infrastructure and simplifies maintenance tasks.
- Longer lifespan compared to structured cable.
- Technology prepared for future services.

Benefits for the installer

- Considerable savings in installation times compared to structured cable.
- Systems with low levels of interference.
- Simplification of maintenance tasks and network operations.
- High security wiring against fires.
- Material and labour cost savings.
- Installation free of noise, distortion and interference in the TV transmission.

Benefits for owners and end users

- Low maintenance costs.
- Safe infrastructure that guarantees a low risk of fire.
- Discreet installation without aesthetic disturbances.
- Long lasting technology ready for the services of the future.

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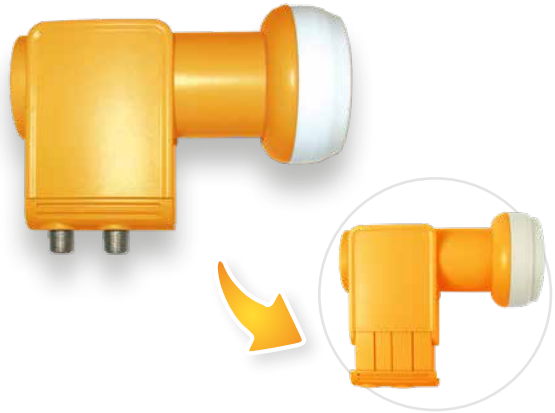
Solution products

LNB WideBand 2 outputs: V/H

Ref. 747402

Wideband LNB converter, characterized by a single local oscillator.

It captures the entire frequency spectrum of a satellite and transmits them through two otputs (V-H) in a frequency range between 290 and 2340 MHz.



REF.	DESCRIPTION	EAN 13
747402	**Wideband LNB (2 Outputs H-V) G 57dB for Overlight solution**	8424450251133

	Ref.	747402
Frequency range	GHz	10.7...12.75
Output frequency range	MHz	290...2340
L.O. frequency 22KHz	GHz	10.41
Gain	dB	57
Noise figure	dB	1
L.O. stability	MHz	-1.5...1.5
Polarities discrimination	dB	> 20
Phase noise (@10 KHz)	dBc	-80
Powering	Vdc	10.5...21
Max. current	mA	100
Impedance	Ω	75
Connectors	mA	"F" Female
LNB-bracket diameter	mm	40
Operating temperature	°C	-40...60

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WIDEBAND AMPLIFIERS

Ref. 237561/62

Compact WideBand amplifiers for 1-satellite Overlight installations. They are responsible for compensating the losses of the coaxial cable in the installation. These devices are equipped with 2 (H/V) WideBand inputs and 2 (H/V) WideBand outputs (250-2400 MHz). Indoor use.

REF.	DESCRIPTION	EAN 13
237561	**Overlight WideBand Amplifier G 13dB 1xSat 250...2400MHz**	8424450271766
237562	**Overlight WideBand Amplifier G 29dB 1xSat 250...2400MHz**	8424450271759

	Ref.	237561	237562
Number of inputs		2	
Number of outputs		2	
Bands		SAT	
Frequency range	MHz	250...2400	
Output level EN60728-3 IMD3 2tones -35dB	dBµV	118	
Gain	dB	13	29
Gain adjustment range	dB	0...13	
Slope regulation	dB	0...12	
Isolation	dB	> 25	
Powering	Vdc	12...18	
DC pass through SAT line	mA	500	
Max current (@12V)	mA	110	150
Max current (@18V)	mA	73	100
Max. power consumption	W	1.32	1.8
Protection index		20	
Weight	g	400	
Dimensions (xyz)	mm	137x120x30	

OPTICAL TRANSMITTERS (indoor)

Ref.237503/04/05

CWDM optical transmitters specifically designed for indoor installation. These devices receive the satellite signal from the outputs of a Wideband RF LNB and terrestrial band and send it to up to 64 users, through a single fiber output ("SC/APC" connection).

REF.	DESCRIPTION	EAN 13
237503	**Optical transmitter indoor with optical output at 1310nm and 10dBm optical power**	8424450271858
237504	**Optical transmitter indoor with optical output at 1550nm and 9dBm optical power**	8424450271872
237505	**Optical transmitter indoor with optical output at 1570nm and 9dBm optical power**	8424450272077

	Ref.	237503			237504			237505		
Inputs/Bands		TERR	V	H	TERR	V	H	TERR	V	H
Frequency range	MHz	47...694	290...2340	290...2340	47...694	290...2340	290...2340	47...694	290...2340	290...2340
Input level	dBµV	83...95	70...85	70...85	83...95	70...85	70...85	83...95	70...85	70...85
Powering per inputs	Vdc	11.7...17.7	11.7...17.7	-	11.7...17.7	11.7...17.7	-	11.7...17.7	11.7...17.7	-
Máx. Current pass	mA	500	500	-	500	500	-	500	500	-
Max. current pass total inputs	mA	720								
Impedance	Ω	75								
Laser		MQW-DFB uncooled								
Wavelength	nm	1310±3			1550±3			1570±3		
Optical output power	dBm	10			9			9		
RF connectors		"F" Female								
Optical connectors		SC/APC								
Powering	Vdc	12...18								
Max. power consumption	W	5.6								
Current consumption	mA	<430								
Operating temperature	ºC	-5...45								
Weight	g	400								
Dimensions (xyz)	mm	137x126x45								

PSU		
PSU input voltage	Vac	100...240
Max. PSU current input	mA	600
PSU output voltage	Vdc	12
Max PSU output current	A	1,5
Weight	g	145
Dimensions (xyz)	mm	95x35x88

OPTICAL TRANSMITTERS (outdoor)

Ref.237513/14/15

CWDM optical transmitters specifically designed for outdoor installation, at a minimum distance from the LNB . These devices receive the satellite signal from the outputs of a Wideband RF LNB and terrestrial band and send it to up to 64 users, through a single fiber output ("FC/APC" connection).

They include a protective case for its outdoor installation (IP22).

REF.	DESCRIPTION	EAN 13
237513	**Optical transmitter outdoor with optical output at 1310nm and 10dBm optical power**	8424450271865
237514	**Optical transmitter outdoor with optical output at 1550nm and 9dBm optical power**	8424450271889
237515	**Optical transmitter outdoor with optical output at 1570nm and 9dBm optical power**	8424450272084

	Ref.	237513			237514			237515		
Inputs/Bands		TERR	V	H	TERR	V	H	TERR	V	H
Frequency range	MHz	47...694	290... 2340	290... 2340	47...694	290... 2340	290... 2340	47...694	290... 2340	290... 2340
Input level	dBµV	83...95	70...85	70...85	83...95	70...85	70...85	83...95	70...85	70...85
Powering per inputs	Vdc	11.7...17,7	11.7...17.7	-	11.7...17.7	11.7...17.7	-	11.7...17.7	11.7...17.7	-
Máx. Current pass	mA	500	500	-	500	500	-	500	500	-
Max. current pass total inputs	mA	720								
Impedance	Ω	75								
Laser		MQW-DFB uncooled								
Wavelength	nm	1310±3			1550±3			1570±3		
Optical output power	dBm	10			9			9		
RF connectors		"F" Female								
Optical connectors		FC/APC								
Powering	Vdc	12...18								
Max. power consumption	W	5.6								
Current consumption	mA	<430								
Operating temperature	ºC	-5...45								
Weight	g	400								
Dimensions (xyz)	mm	137x126x45								

PSU		
PSU input voltage	Vac	100...240
Max. PSU current input	mA	600
PSU output voltage	Vdc	12
Max PSU output current	A	1.5
Weight	g	145
Dimensions (xyz)	mm	95x35x88

OPTICAL RECEIVERS

Ref. 237540/50

Overlight optical receivers for Wideband satellites and terrestrial capture the optical TV signal (1100...1650nm) sent by the optical transmitters and recover the original terrestrial and satellite TV signals. Depending on the type of services to be received, two models are available:

- **Ref. 237540: Overlight Quattro Optical Receiver**: It provides 4 RF outputs with Quattro mode: one of the four TVSAT polarity and band combinations is provided on each connector.
- **Ref. 237550: Overlight Quad Optical Receiver**: It provides 4 RF outputs with Quad mode: the four polarities and bands are provided on each connector.

REF.	DESCRIPTION	EAN 13
237540	**Overlight Optical Receiver Quattro "SC/APC" FM/DAB/UHF-SAT**	8424450246689
237550	**Overlight Optical Receiver Quad "SC/APC" FM/DAB/UHF-SAT**	8424450266731

		Ref.	237540	237550
RF PARAMETERS	RF outputs	Nº / Type	4 x LEGACY 1 x TERR	4 x LEGACY 4 x TERR
	Frequency range	MHz	87 ... 694 / 950 ... 2150	
	Impedance	Ohm	75	
	Output level Legacy	dBµV	64...71	
	Output level TERR	dBµV	79...83	69...73
OPTICAL	Wavelength range	nm	1200...1600	
	Optical return losses	dB	>40	
	Optical device	Type	InGaAs	
	Optical input level	dBm	-13 ... -6	
GENERAL	RF connectors	Nº / Type	5 x "F" Female	4 x "F" Female
	Optical connectors	Nº / Type	1 x SC/APC	
	Output voltage	V⎓	12...18	
	Max. current	mA	750 @12V⎓ 570 @18V⎓	750 @12V⎓ 530 @18V⎓
	Operating temperature	ºC	-5 ... +45	
	Weight	g	400	
	Dimensions (xyz)	mm	137x120x30	

ACCESSORIES

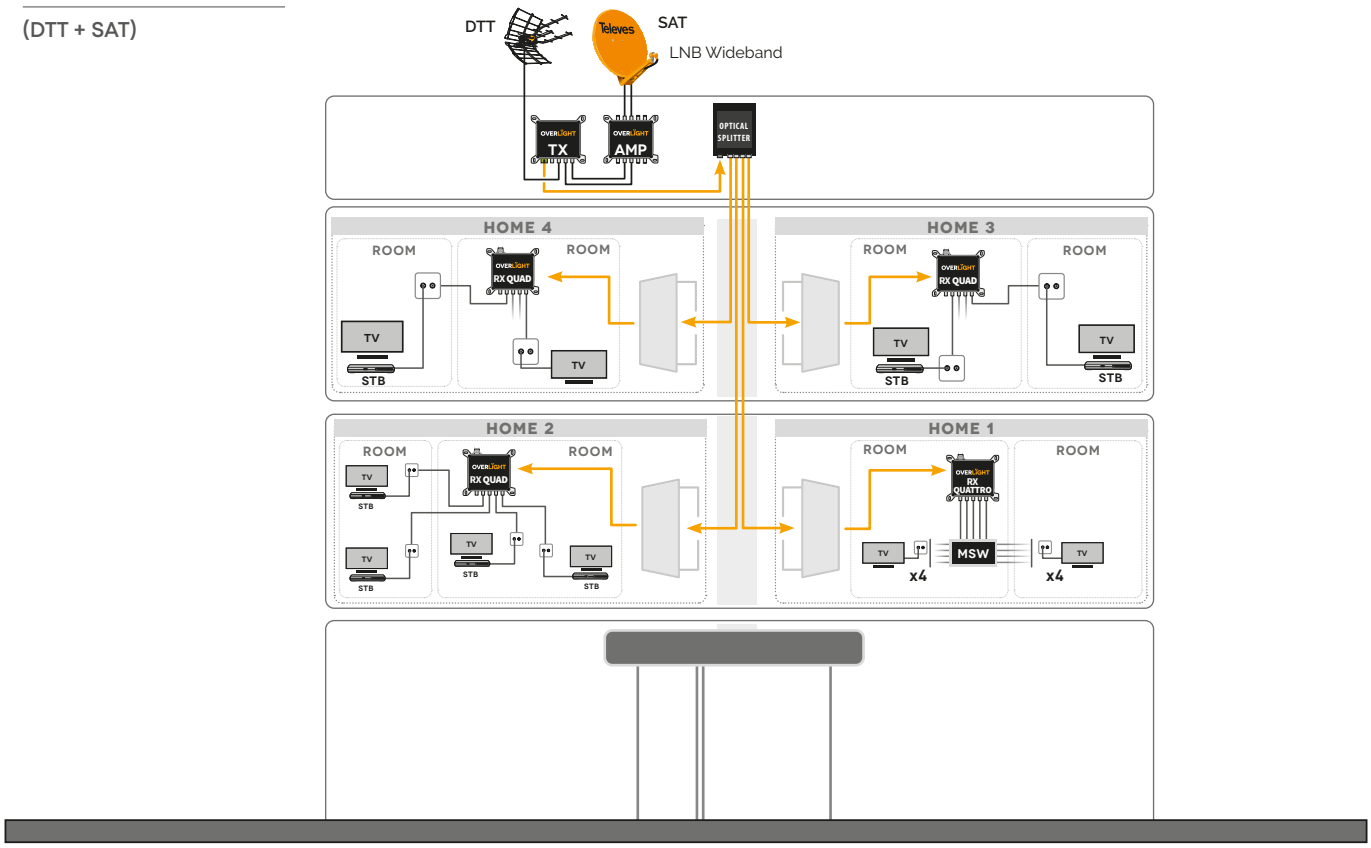
REF.	DESCRIPTION	EAN 13
OPTICAL SPLITTERS		
233710	Optical Splitter 1250...1650nm "SC/APC" 2D 4dB	8424450255681
233910	Optical Splitter 1250...1650nm "SC/APC" 4D 7dB	8424450255698
234410	Optical Splitter 1250...1650nm "SC/APC" 8D 10dB	8424450255704
234510	Optical Splitter 1250...1650nm "SC/APC" 16D 14dB	8424450256015
234610	Optical Splitter 1250...1650nm "SC/APC" 32D 17dB	8424450276778

PRE-TERMINATED PATCH CORDS		
232610	F.O. Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 5m	8424450265598
232611	F.O. Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 10m	8424450222904
232612	F.O. Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 15m	8424450222911
232613	F.O. Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 20m	8424450265604
232614	F.O. Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 25m	8424450222928
232615	F.O. Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 30m	8424450265611
232616	F.O. Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 40m	8424450222935
232650	F.O. Duplex Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 5m	8424450265628
232651	F.O. Duplex Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 10m	8424450265635
232652	F.O. Duplex Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 15m	8424450221181
232653	F.O. Duplex Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 20m	8424450265642
232654	F.O. Duplex Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 25m	8424450221198
232656	F.O. Duplex Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 40m	8424450221204
232657	F.O. Duplex Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 55m	8424450221211

OPTICAL ATTENUATORS		
236410	Optical Attenuator 1310/1550nm "SC/APC" 2dB	8424450190449
236411	Optical Attenuator 1310/1550nm "SC/APC" 5dB	8424450190456
236412	Optical Attenuator 1310/1550nm "SC/APC" 10dB	8424450190463
236413	Optical Attenuator 1310/1550nm "SC/APC" 15dB	8424450256022

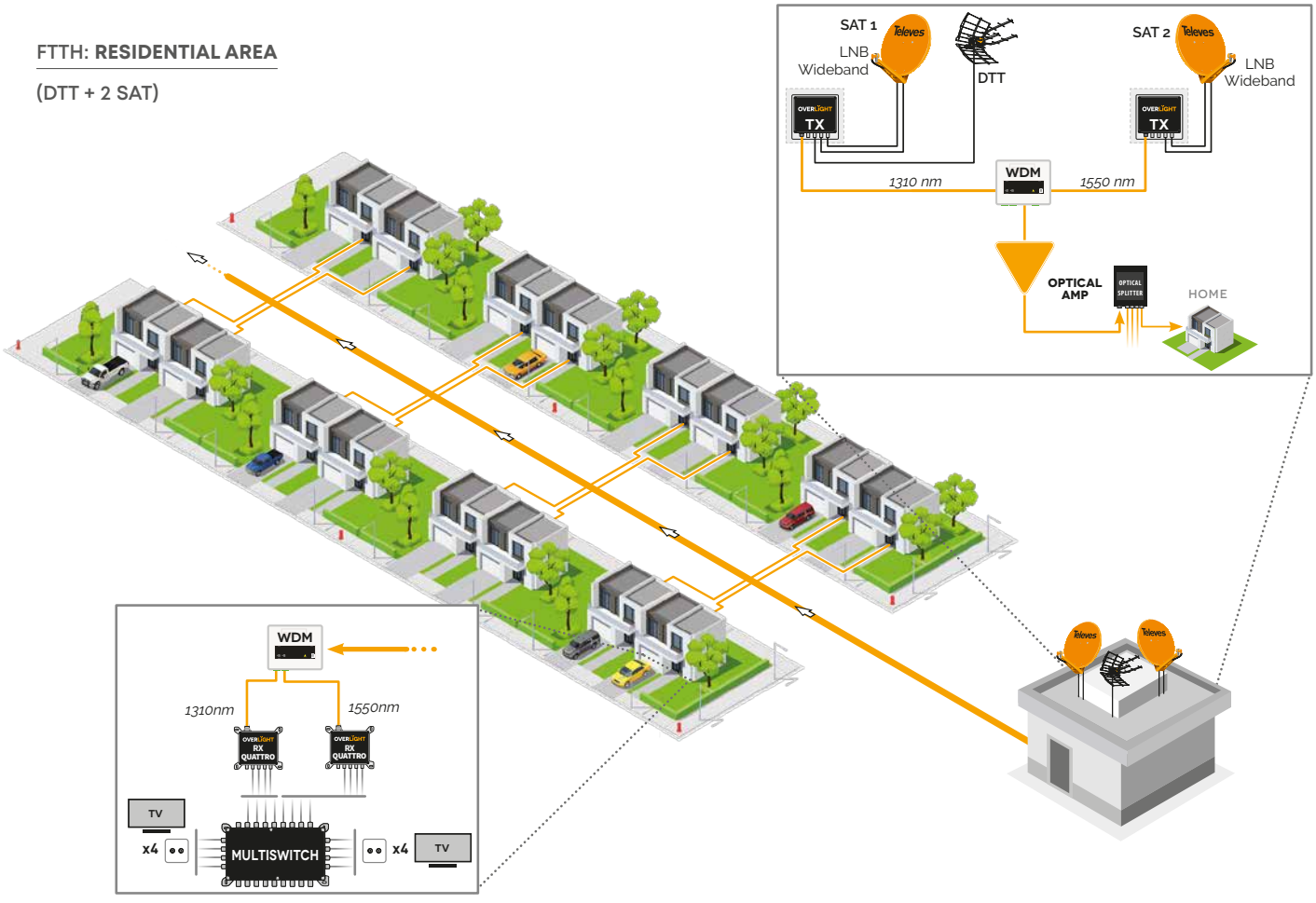
FTTH: **PRIVATE BUILDING**

(DTT + SAT)



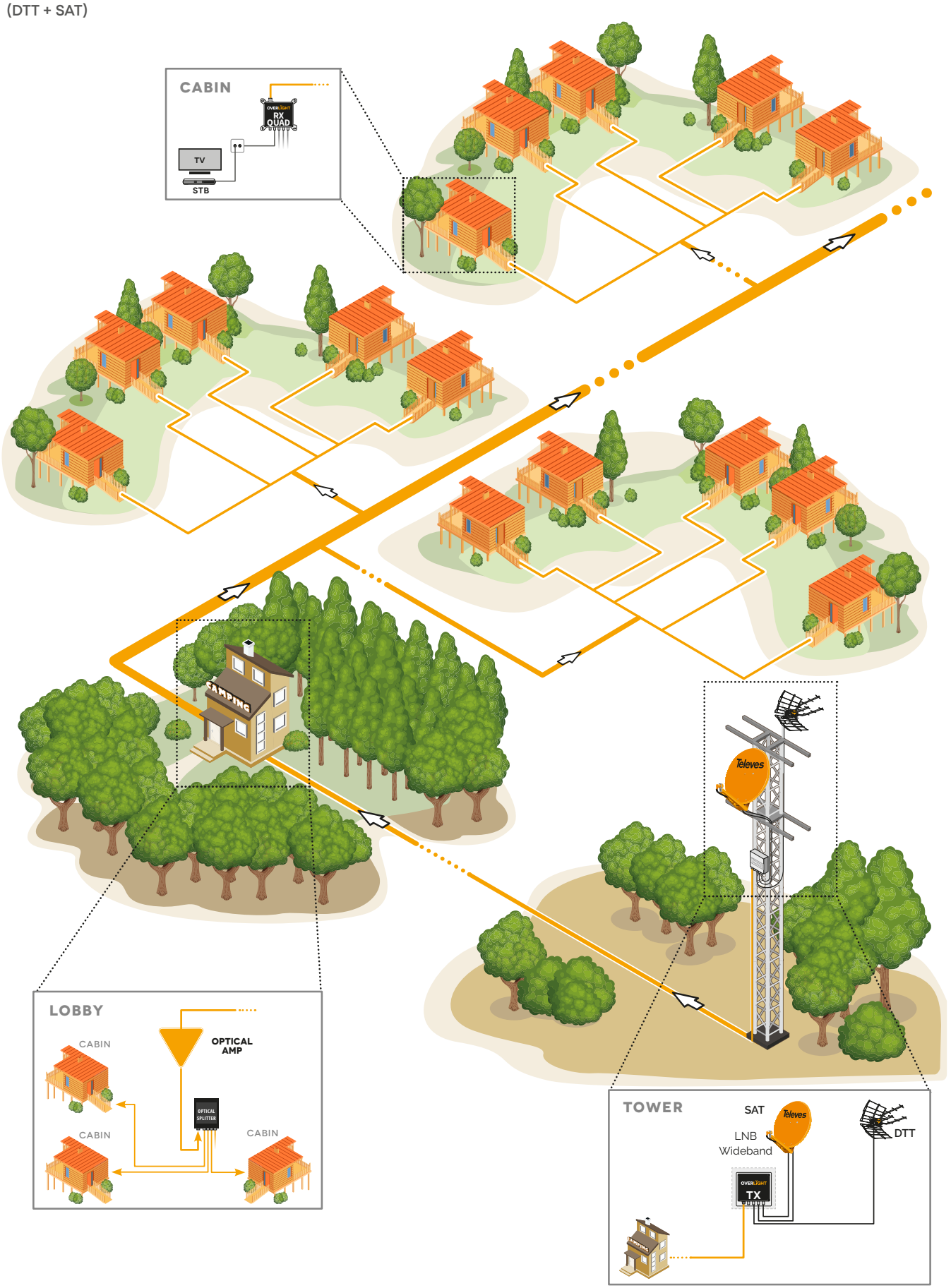
FTTH: **RESIDENTIAL AREA**

(DTT + 2 SAT)



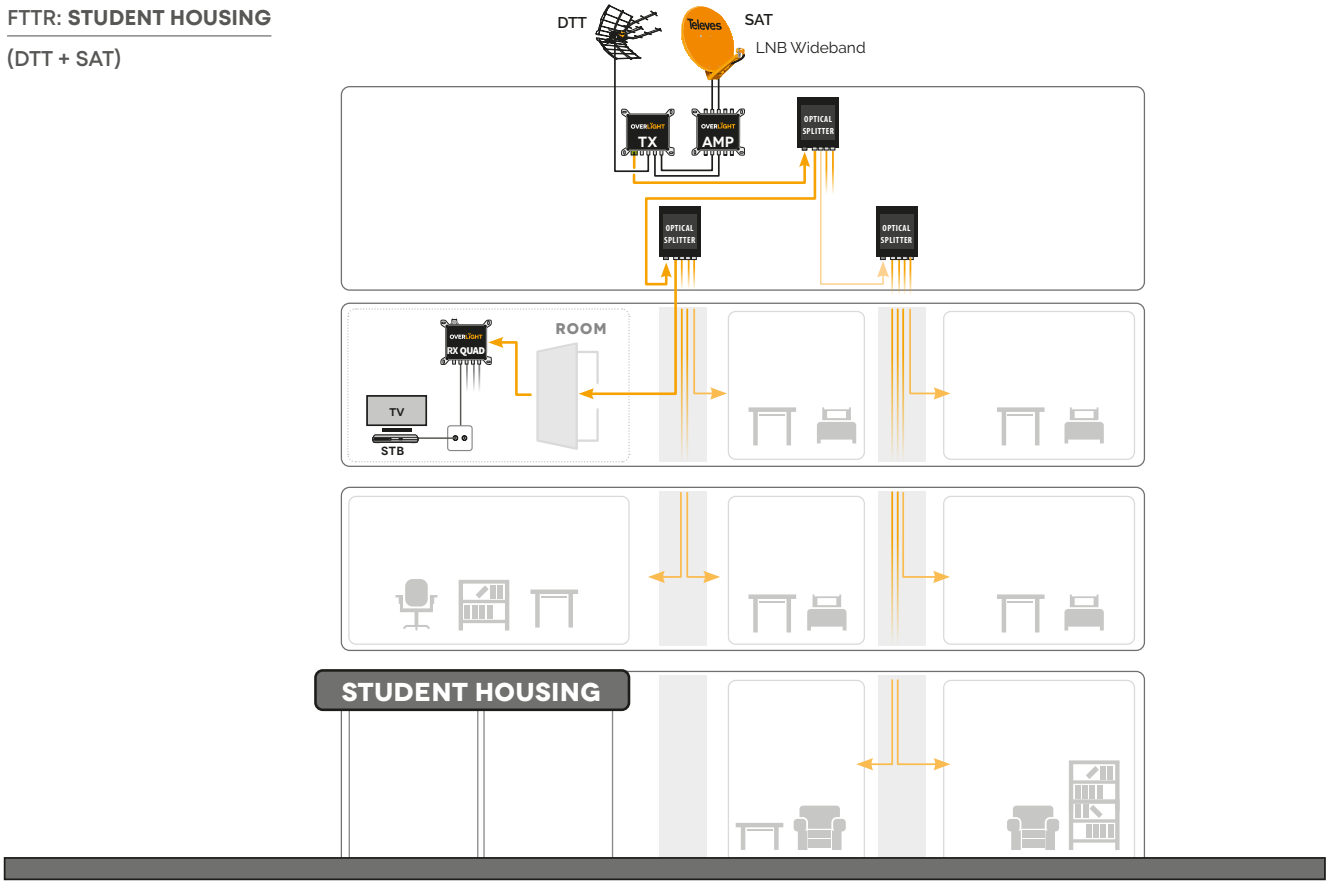
FTTH: **CAMPSITE** (OUTDOOR INSTALLATION)

(DTT + SAT)



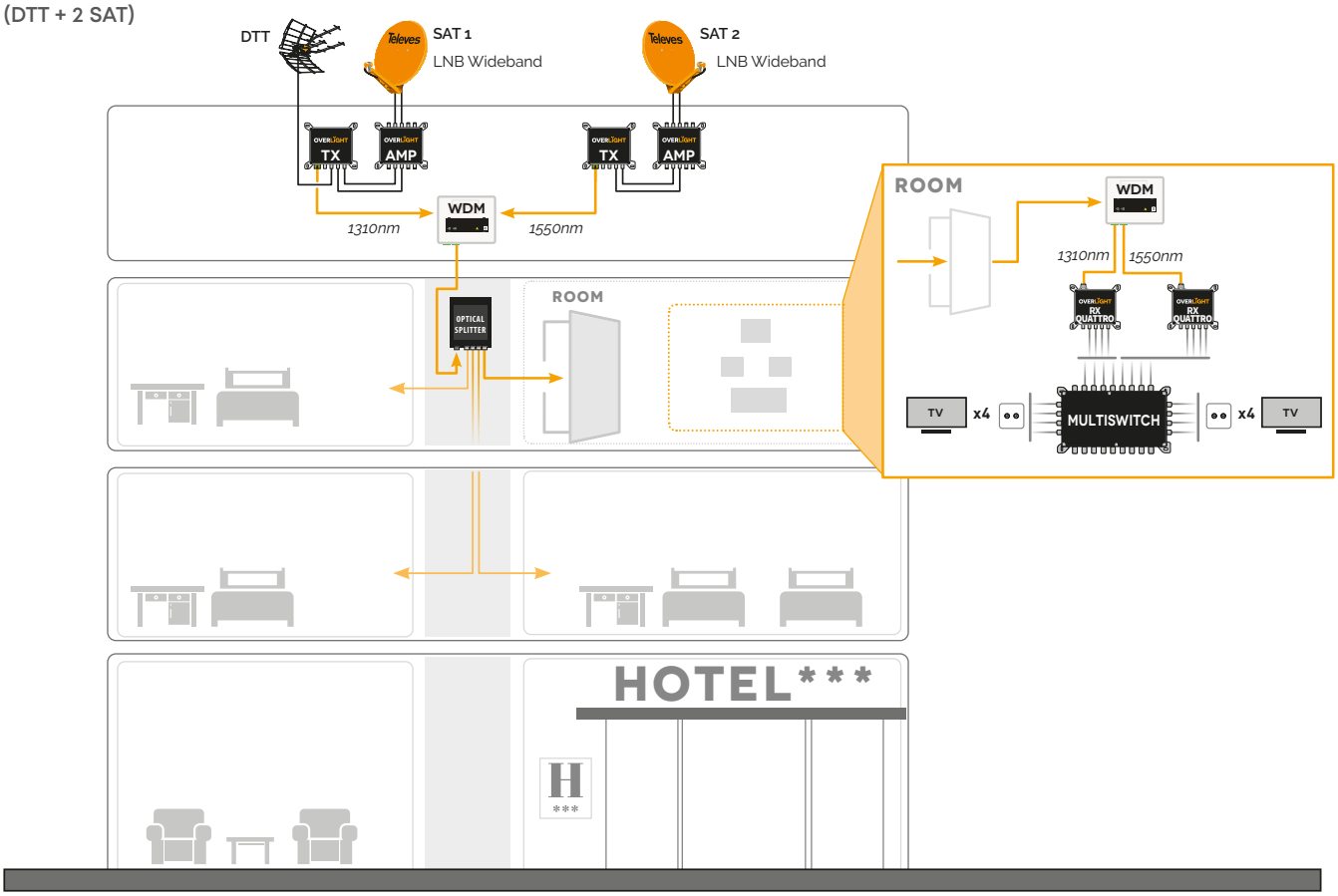
FTTR: **STUDENT HOUSING**

(DTT + SAT)



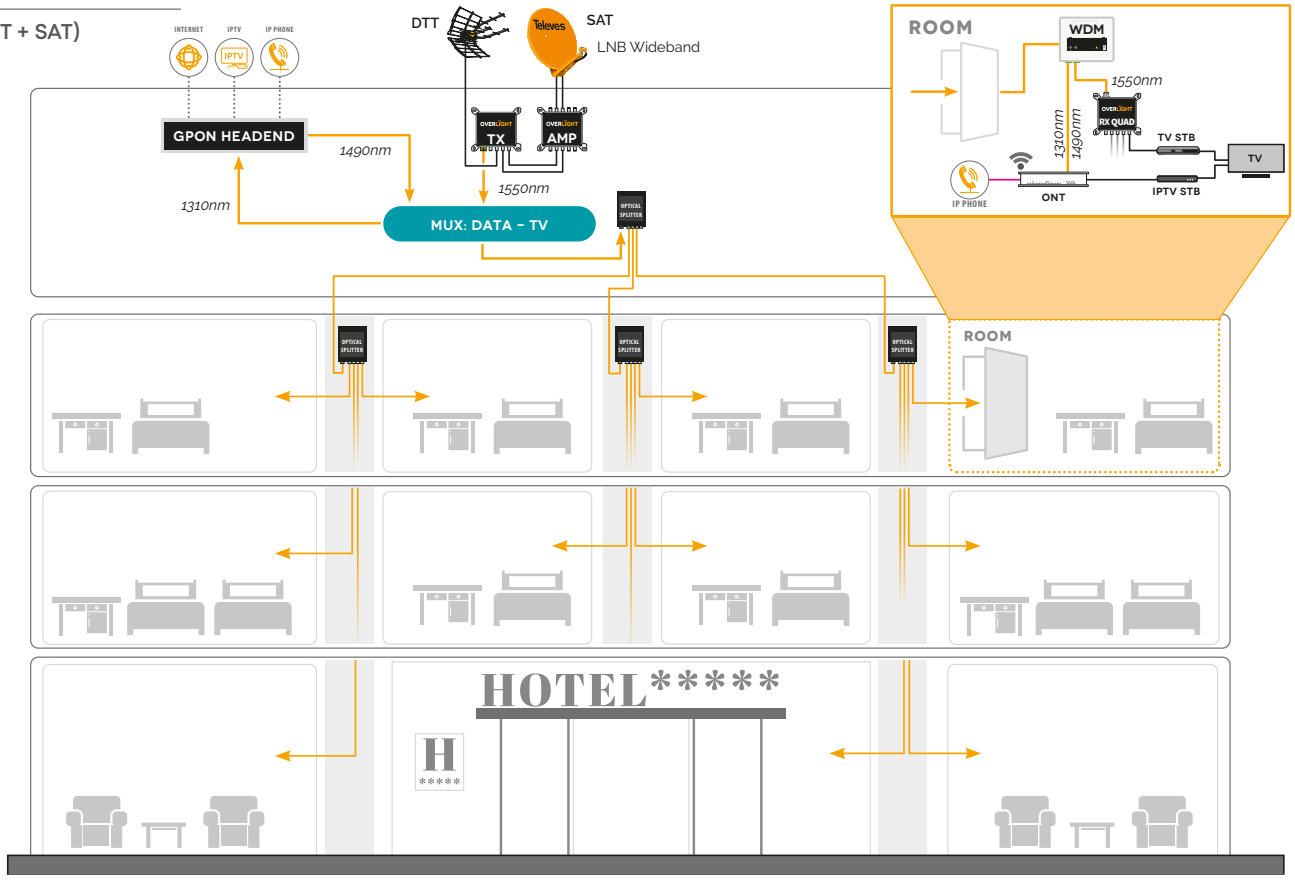
FTTR: **HOTEL**

(DTT + 2 SAT)



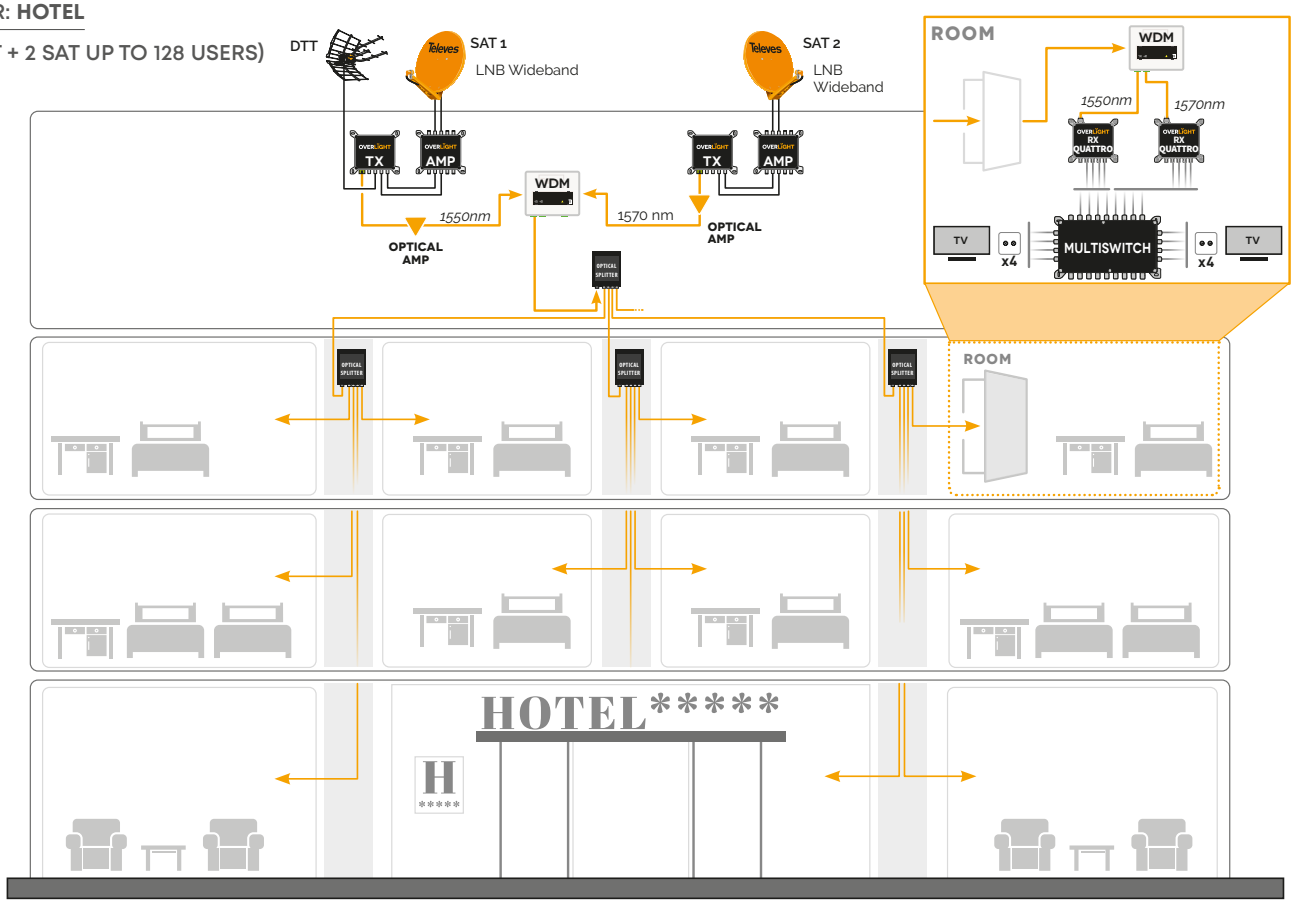
FTTR: **HOTEL + GPON**

(DTT + SAT)



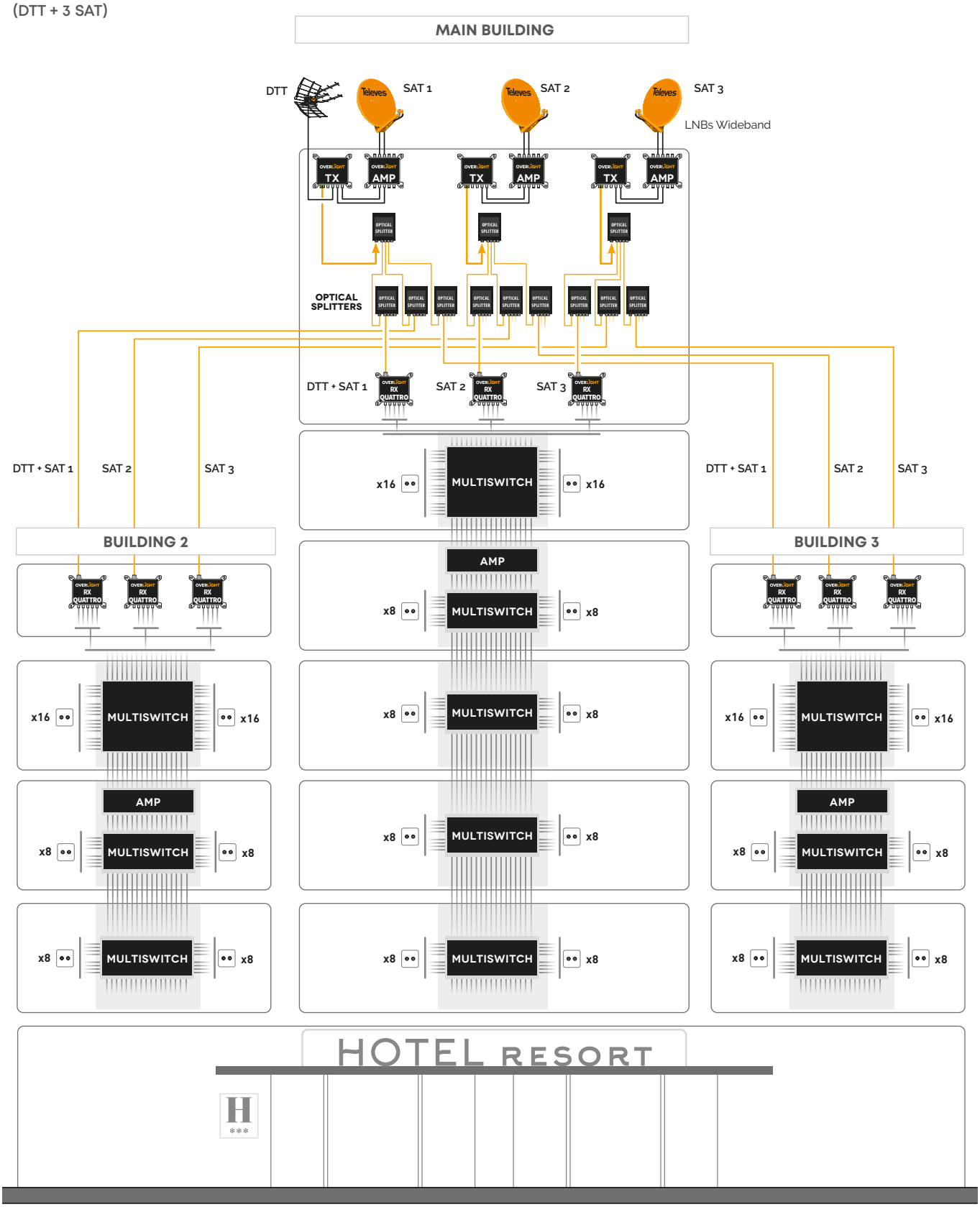
FTTR: **HOTEL**

(DTT + 2 SAT UP TO 128 USERS)



FTTB: **HOTEL COMPLEX**

(DTT + 3 SAT)



More information at:

en.televes.com/overlight

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