2026 Edition

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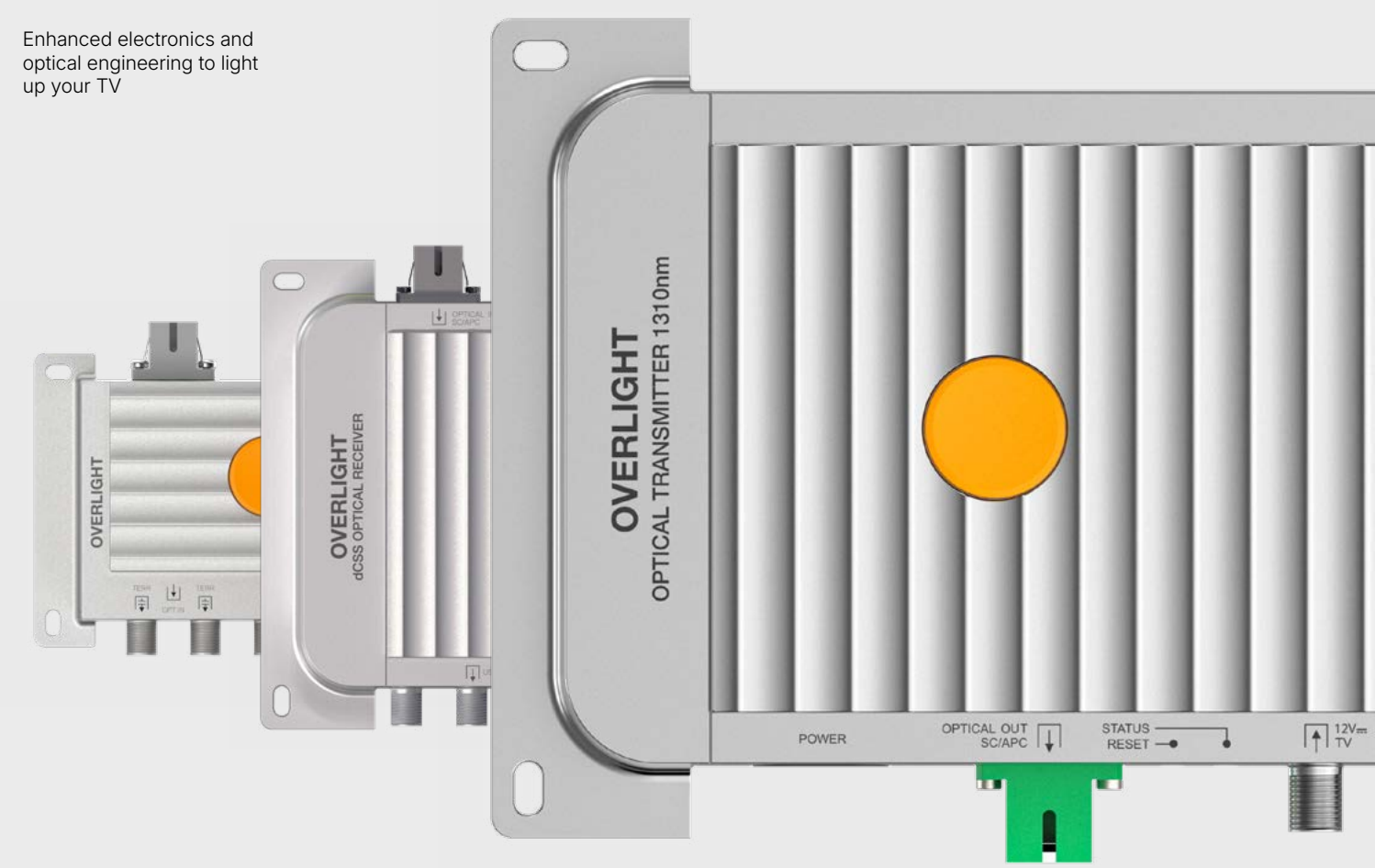
OVERLIGHT SERIES

Satellite and terrestrial TV distribution over fibre optics

Enhanced electronics and optical engineering to light up your TV



Televes

Satellite and terrestrial TV distribution over fibre optics

With the Overlight series you will get an integrated TV installation with all the services through a single optical fibre, **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 fibre 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.

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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 up to a maximum of 512 while mantaining signal quality.

Satellite and terrestrial distribution is carried out through a single optical fibre, which reduces installation costs and materials.

Optimized electronic performance resulting in low loss and a balanced end-to-end TV signal for all DTT services and up to 4 full satellites.

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.

100% Televes philosophy: designed, developed and manufactured entirely in our robotic facilities.

The Overlight series is part of a new generation of award-winning products, recognized with 4 prestigious international awards, highlighting its innovative design based on two key concepts: **modularity and design language.**

LNB WideBand 2 outputs: V/H

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.

747402 LNB Wideband (2 Salidas H-V) G 57dB

Ref.		747402
Frequency range	GHz	10,7...12,75
Output frequency range	MHz	290...2340
L.O. frequency 22 KHz	GHz	10,41
Gain	dB	57
Noise figure	dB	0,3
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		"F" Female
LNB-bracket diameter	mm	40
Operating temperature	°C	-40...60

CWDM optical transmitters (indoor)

237603

These optical transmitters receive both the satellite signal (Wideband LNB) and the terrestrial band signal, converting them into an optical signal capable of serving up to 64 users without amplification, via a single fibre output with an "SC/APC" connector.

These devices offer a complete solution in a single compact chassis with multiple integrated functionalities:

- The **18 dB amplifier** on the satellite inputs removes the need for Wideband pre-amplifiers.
- They correct the frequency slope of the input level by means of the **WideBand equalizer.**
- They reduce the number of devices required by **remotely powering** the LNB and a mast amplifier or intelligent antenna.
- They simplify installation and optimise space with **integrated power supply.**

The range includes models with different wavelengths, allowing multiplexing of their optical signals to transmit up to 4 full satellites, DTT, DAB and FM over a single fibre.

237603	Optical output at 1310nm and 10dBm
237604	Optical output at 1550nm and 9dBm
237605	Optical output at 1570nm and 9dBm
237606	Optical output at 1510nm and 9dBm
237607	Optical output at 1530nm and 9dBm

Configuration is quick and easy from an Android or iOS mobile device with the free ASuite application, thanks to the integrated Bluetooth® connection. From the app, you can **change the amplifier and equalizer parameters** to adjust them to the needs of each installation, as well as **monitoring the input and output signals,** thereby speeding up the process of detecting and resolving incidents.

Ref.		237603			237604			237605			237606			237607		
Inputs/Bands		TERR	V	H	TERR	V	H	TERR	V	H	TERR	V	H	TERR	V	H
Frequency range	MHz	47...694	290...2340		47...694	290...2340		47...694	290...2340		47...694	290...2340		47...694	290...2340	
Input level	dBµV	83...95	70...85		83...95	70...85		83...95	70...85		83...95	70...85		83...95	70...85	
Equalizator	dB	-	0...12		-	0...12		-	0...12		-	0...12		-	0...12	
Gain	dB	-	18		-	18		-	18		-	18		-	18	
Powering per inputs	Vdc	12	-		12	-		12	-		12	-		12	-	
Max. current pass	mA	500	-		500	-		500	-		500	-		500	-	
Max. current pass total inputs	mA	720														
Impedance	Ω	75														
Laser		MQW-DFB														
Wavelength	nm	1310			1550			1570			1510			1530		
Optical output power	dBm	10			9			9			9			9		
RF connectors		"F" Female														
Optical connectors		SC/APC														
Powering	Vac	110...230														
Mains frequency		50 Hz / 60 Hz														
Operating temperature	ºC	-5...45														
Weight	g	888														
Dimensions (xyz)	mm	201 × 122 × 41														

CWDM optical transmitters (outdoor)

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 without the need for amplification, through a single fibre output (“FC/APC” connection).

Thanks to the different options offered with wavelengths of 1510, 1530, 1550 or 1570 nm, the system allows the transmission of up to 4 full satellites through a single optical fibre.

They include a protective case for its outdoor installation (IP22). An external power supply and adapter cable are included to provide power through the dedicated “F” connector.

237513	Optical output at 1310nm and 10dBm
237514	Optical output at 1550nm and 9dBm
237515	Optical output at 1570nm and 9dBm
237516	Optical output at 1510nm and 9dBm
237517	Optical output at 1530nm and 9dBm

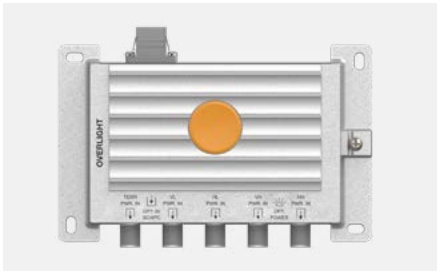
Ref.		237513			237514			237515			237516			237517		
Inputs/Bands		TERR	V	H	TERR	V	H	TERR	V	H	TERR	V	H	TERR	V	H
Frequency range	MHz	47...694	290... 2340		47...694	290... 2340		47...694	290... 2340		47...694	290... 2340		47...694	290... 2340	
Input level	dBµV	83...95	70...85		83...95	70...85		83...95	70...85		83...95	70...85		83...95	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		-
Max. current pass	mA	500		-	500		-	500		-	500		-	500		-
Max. current pass total inputs	mA	720														
Impedance	Ω	75														
Laser		MQW-DFB														
Wavelength	nm	1310			1550			1570			1510			1530		
Optical output power	dBm	10			9			9			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	137 × 126 × 45														
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	95 × 35 × 88														

Optical receivers

Optical receivers are in charge of capturing the optical TV signal (1200...1600nm) sent by the transmitters in order to process it and recover the original satellite and terrestrial TV signals. Depending on the type of services to be received, four models are available:

- **Quattro Optical Receiver:** It offers 1 terrestrial band output and 4 outputs in Quattro mode, providing a combination of TVSAT polarity and band in each connector. Power is supplied through the multiswitch.
- **Quad Optical Receiver:** It offers 4 outputs, each providing terrestrial band and the four TVSAT combinations of polarity and band. Power is supplied through the STB or by an external PSU using the included adapter cable.
- **dCSS Optical Receiver 2 SKY Outputs:** It offers 2 RF outputs for SKY services (dCSS/Legacy+Terrestrial), and two additional for terrestrial only. External power supply included.
- **dCSS Optical Receiver 4 SKY Outputs**: It offers SKY services (dCSS/Legacy) and terrestrial TV through its 4 RF outputs. External power supply included.

237641



Engineered for maximum precision, the Quattro receiver features OLC (Optical Level Control) technology, delivering a **stable RF output level regardless of input signal** fluctuations.

237623

237641	Quattro optical receiver
237650	Quad optical receiver
237623	dCSS optical receiver 2 SKY outputs (PSU with UK plug included)
237633	dCSS optical receiver 4 SKY outputs (PSU with UK plug included)

Ref.		237641		237650		237623		237633	
Inputs/Bands		TERR	Legacy	TERR	Legacy	TERR	dCSS/Legacy	TERR	dCSS/Legacy
Number of outputs		1	4	4	4	4	2	4	4
Output level	dBµV	-	-	69...73	64...71	69...73	80/64...71	69...73	80/64...71
Output level (OLC range)	dBµV	>90	>80	-	-	-	-	-	-
Output frequency range	MHz	87...694	950...2150	87...694	950...2150	87...694	950...2150	87...694	950...2150
Impedance	Ω	75							
Wavelength	nm	1200...1600							
Optical device		InGaAs PIN photodiode							
OLC range	dBm	-10...-1		-					
Optical input level	dBm	-15...1		-13...-6					
Optical return losses	dB	>40							
RF Connectors		"F" female							
Optical Connectors		SC/APC							
Powering	Vdc	12...18							
Max. current consumption (@12V)	mA	370		790		550		790	
Max. current (@18V)	mA	574		560		410		560	
Operating temperature	ºC	-5...+45							
Weight	g	360		670		360		670	
Dimensions (xyz)	mm	125 × 91 × 30		149 × 130 × 43		125 × 91 × 30		149 × 130 × 43	
PSU									
PSU input voltage	Vac	-				100...240			
PSU output voltage	Vdc	-				12			
Max. PSU output current	A	-				1,5			
Weight	g	-				164			
Dimensions (xyz)	mm	-				96 × 43 × 60			

These measurements are conditioned to the use of an Overlight transmitter.

Accessories

OPTICAL MULTIPLEXERS AND DEMULTIPLEXERS

234740	Optical Multiplexer/Demultiplexer Module (WDM) 1310/1490 - 1550nm
234750	CWDM Optical Multiplexer “SC/APC” 4 inputs: 1510/1530/1550/1570 nm - 1 output + PSU, 1RU
234758	CWDM Optical Demultiplexer “SC/APC” 1 input, 4 outputs: 1570/1550/1530/1510 nm

234758

234750

OPTICAL SPLITTERS

233710	Optical Splitter 1250...1650 nm “SC/APC” 2D 4 dB
233910	Optical Splitter 1250...1650 nm “SC/APC” 4D 7 dB
234410	Optical Splitter 1250...1650 nm “SC/APC” 8D 10 dB
234510	Optical Splitter 1250...1650 nm “SC/APC” 16D 14 dB
234610	Optical Splitter1250...1650 nm “SC/APC” 32D 17 dB

234610

PRE-TERMINATED PATCH CORDS

232610	F.O. Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 5 m
232611	F.O. Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 10 m
232612	F.O. Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 15 m
232613	F.O. Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 20 m
232614	F.O. Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 25 m
232615	F.O. Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 30 m
232616	F.O. Patch Cord Single-mode Indoor LSFH Dca "SC/APC" 40 m

232611

ADAPTER CABLES

236127	F.O. Patch Cord Armoured Single-mode Outdoor LSFH UV Resistant SC/APC-FC/APC 25m
236128	F.O. Patch Cord Armoured Single-mode Outdoor LSFH UV Resistant SC/APC-FC/APC 50m

236127

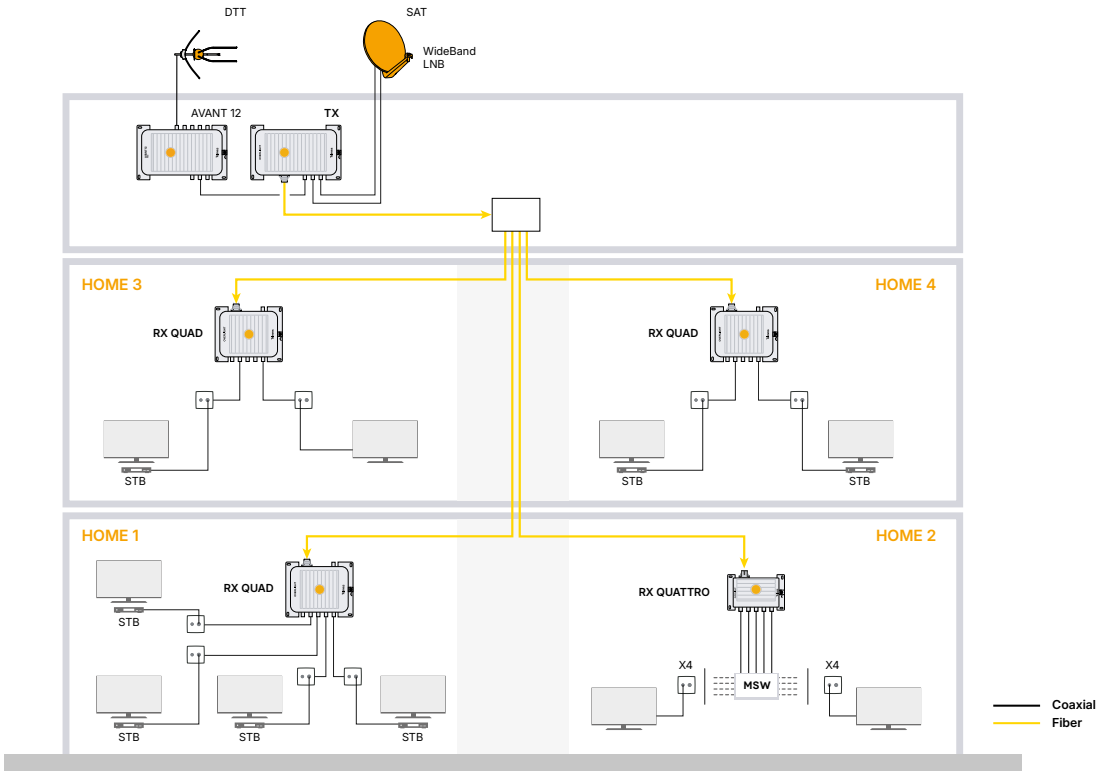
OPTICAL ATTENUATORS

236410	Optical Attenuator 1310/1550 nm “SC/APC” 2 dB
236411	Optical Attenuator 1310/1550 nm “SC/APC” 5 dB
236412	Optical Attenuator 1310/1550 nm “SC/APC” 10 dB
236413	Optical Attenuator 1310/1550 nm “SC/APC” 15 dB

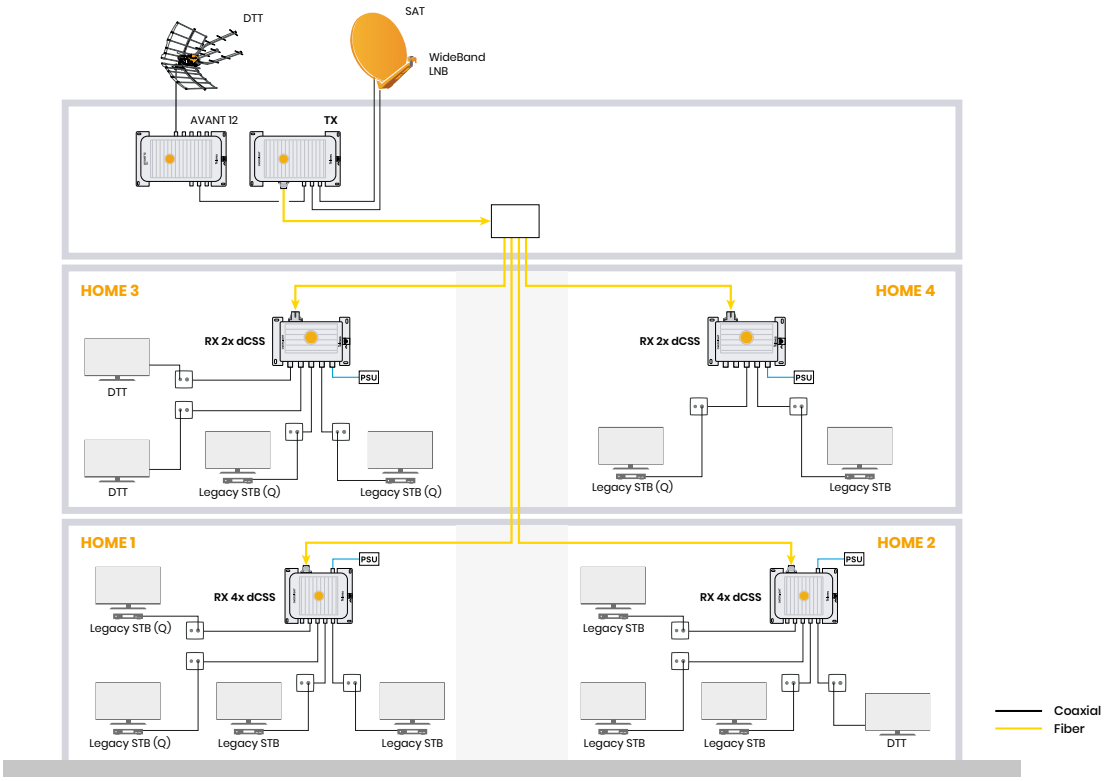
236411

Application examples

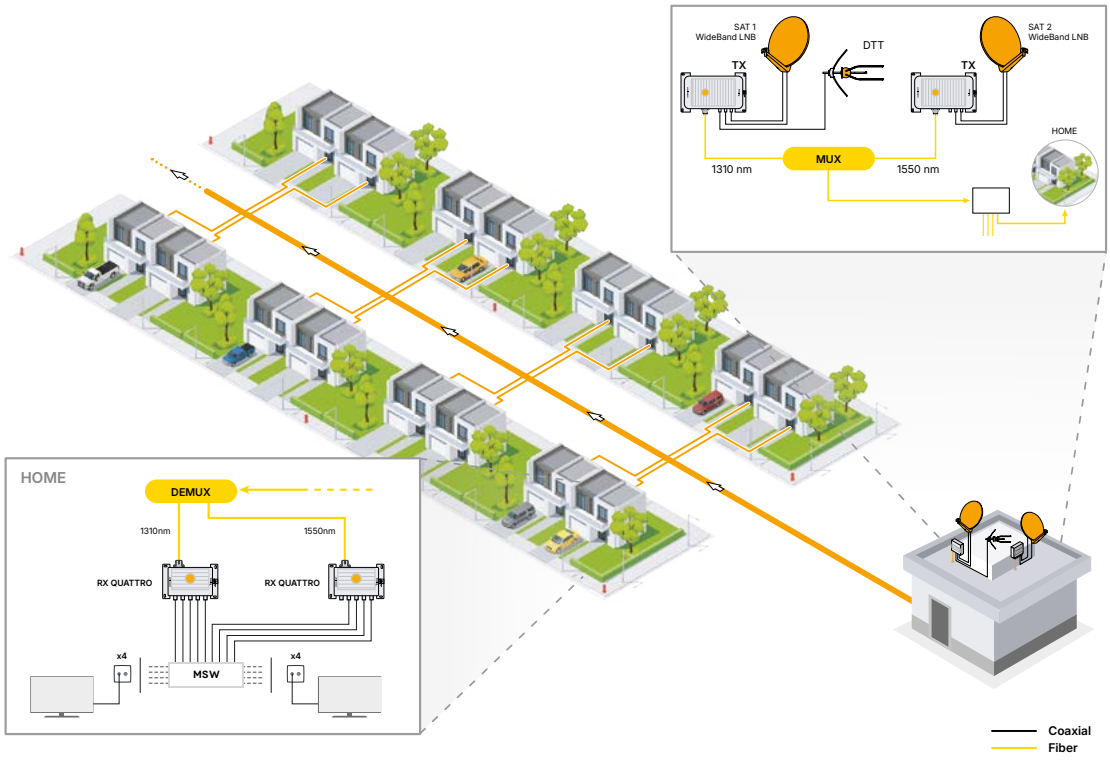
FTTH: Private building (DTT + 1 SAT)



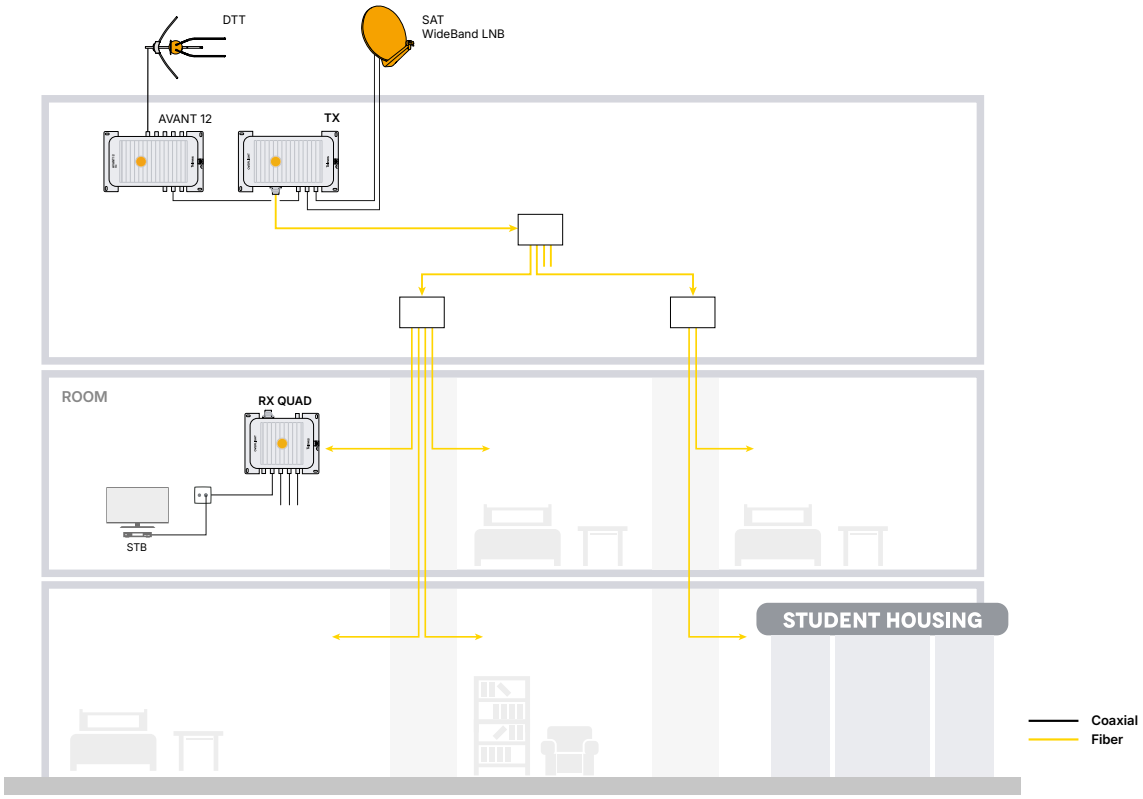
FTTH: Private building (DTT + 1 SAT for dCSS receivers)



FTTH: Residential area (DTT + 2 SAT)

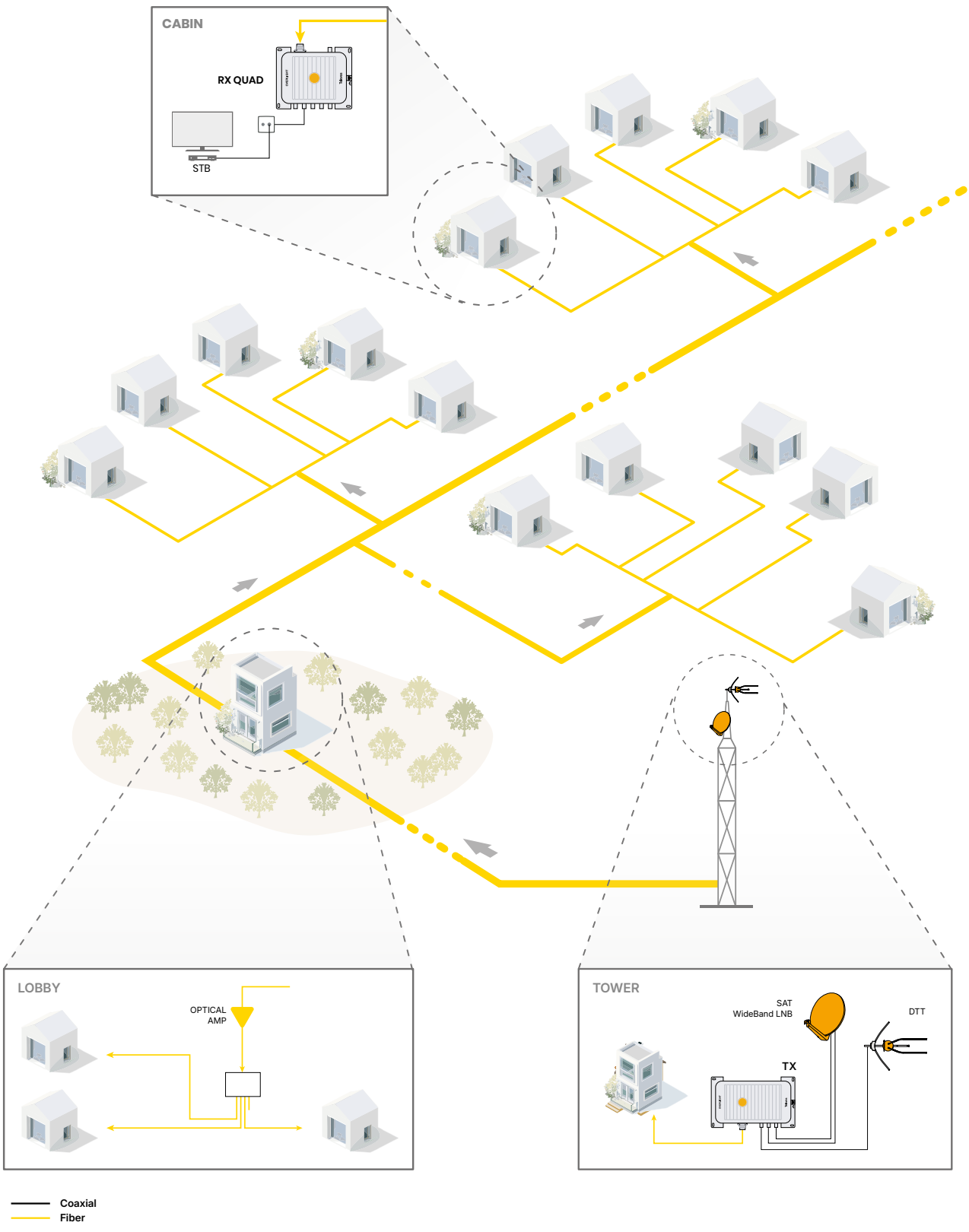


FTTR: Student housing (DTT + 1 SAT)

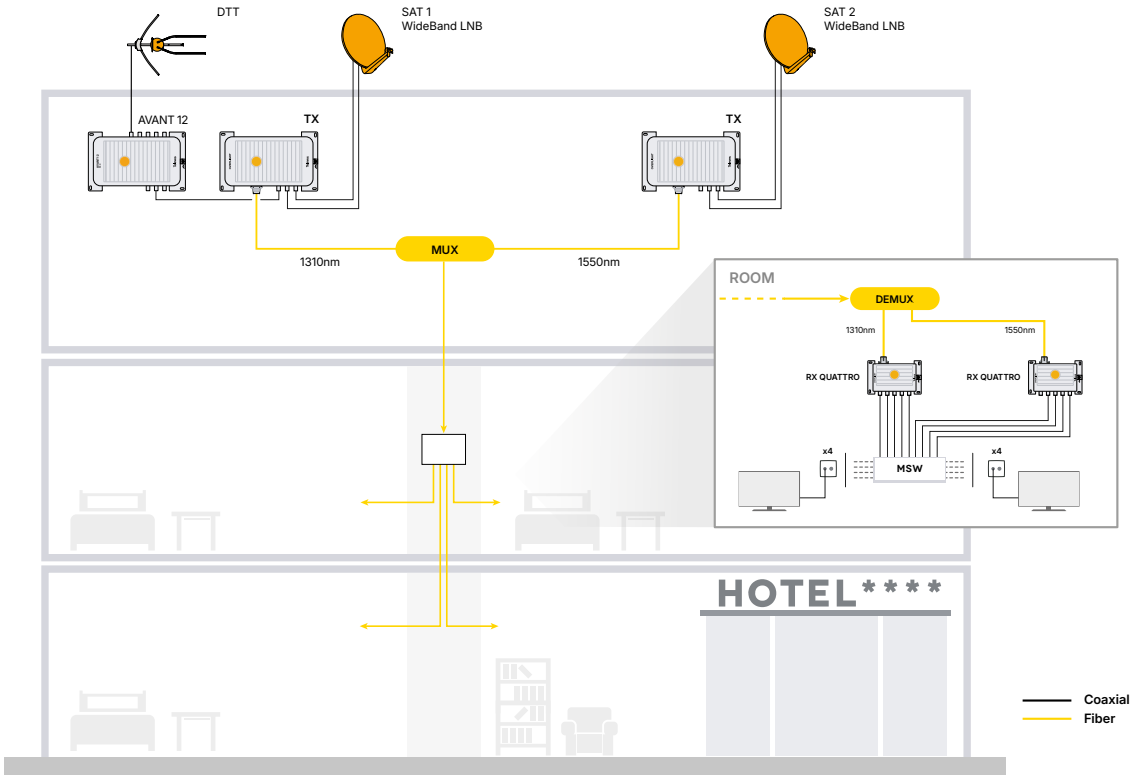


Application examples

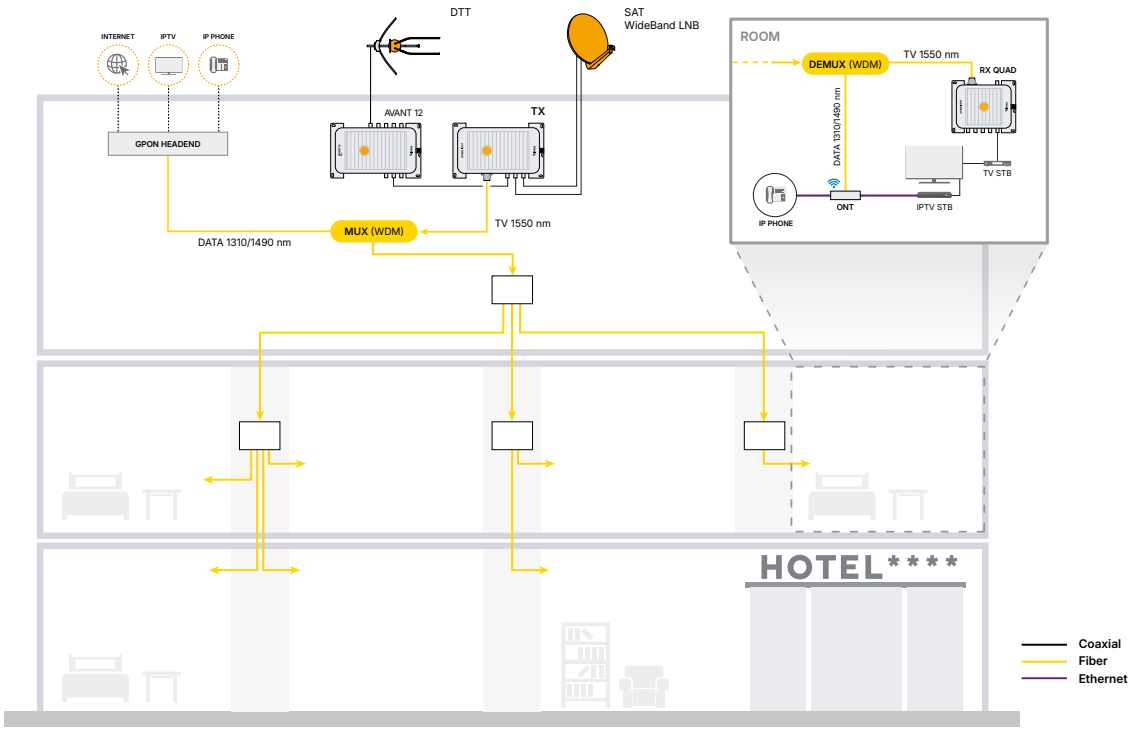
FTTH: Campsite (Outdoor installation) (DTT + 1 SAT)



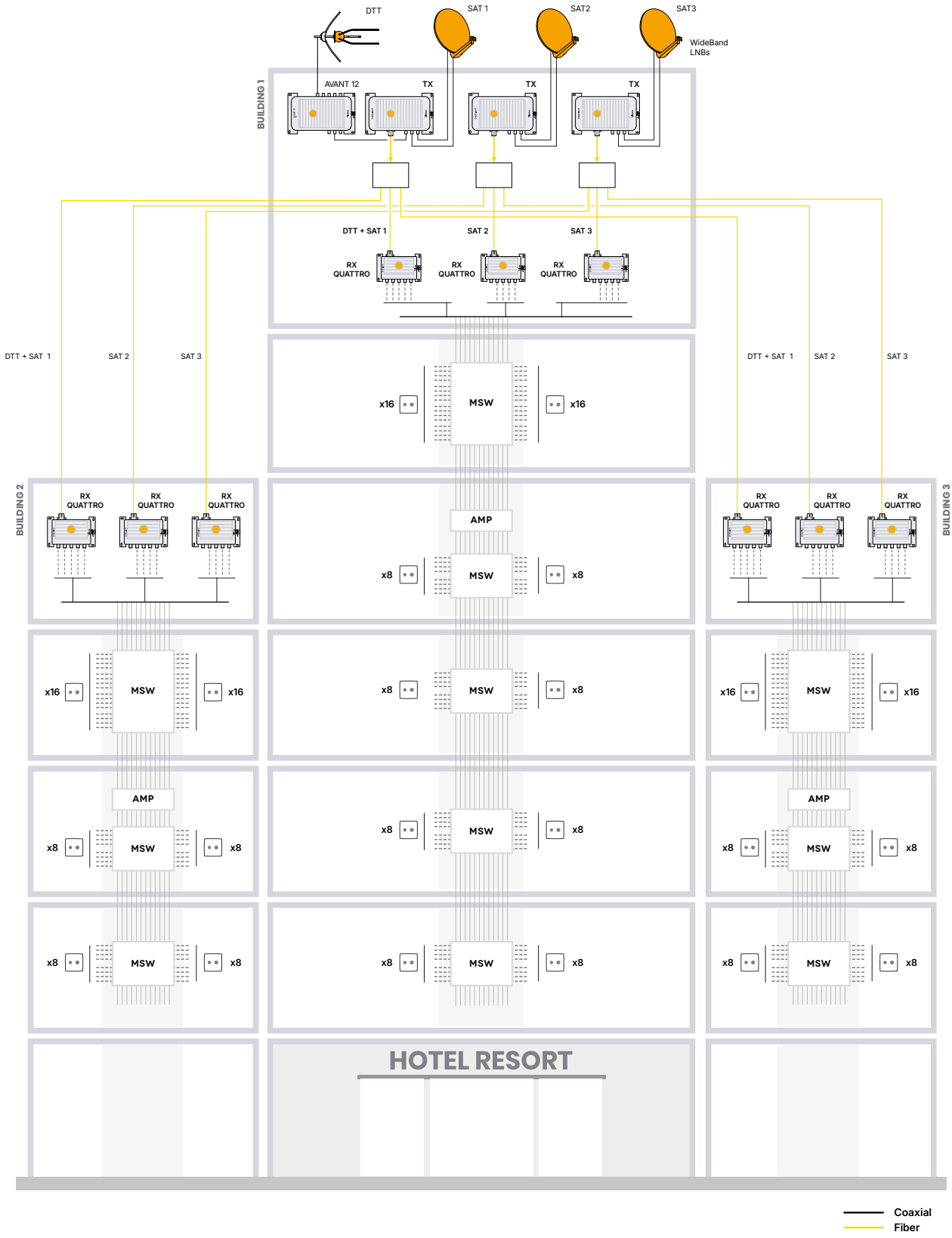
FTTR: Hotel (DTT + 2 SAT)



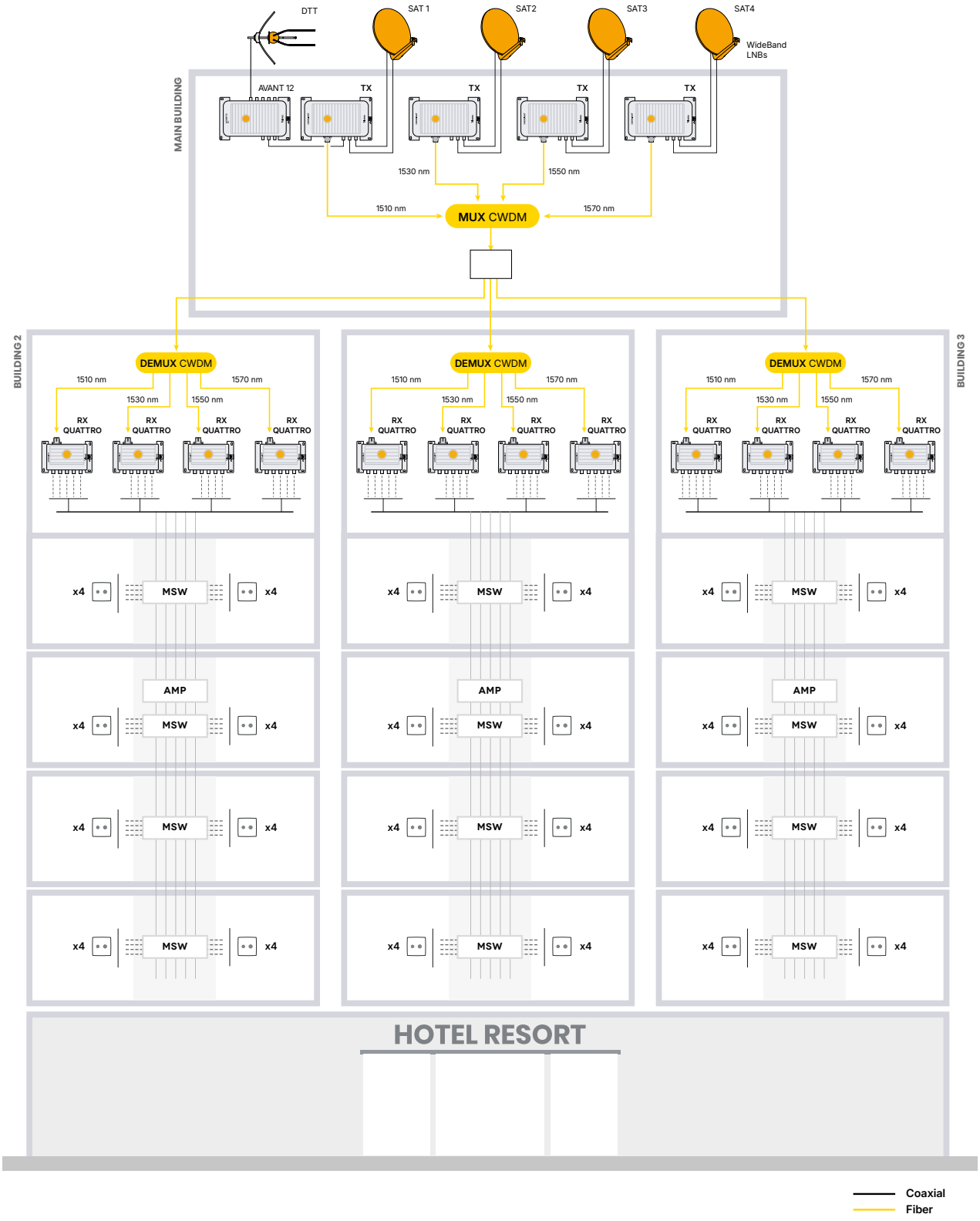
FTTR: Hotel + GPON (DTT + 1 SAT)



FTTB: Hotel Complex (DTT + 3 SAT)



FTTB: Hotel Complex (DTT + 4 SAT)



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