

# 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.



Satellite and Terrestrial  
Distribution



Optimized  
electronic design



GPON  
compatible



100% Made  
in Televes

# OVERLIGHT



## 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.
- **Compatible with GPON deployments**, to incorporate TV services in the Hospitality sector.
- **100% European design, quality and manufacture**.

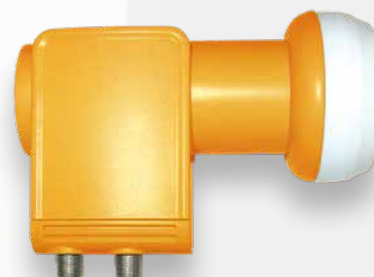
## Solution products

### 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 outputs (V-H) in a frequency range between 290 and 2340 MHz.



	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 ... 1
Polarities discrimination	dB	> 20
Phase noise (@10 KHz)	dBc	-80
Powering	Vdc	10.5 ... 21
Max. current	mA	100
Impedance	Ω	75
LNB-bracket diameter	mm	40
Operating temperature	°C	-40 ... 60

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

## OPTICAL TRANSMITTERS

Ref.237501/02

CWDM optical transmitters that receive the satellite signal coming 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
237501	Optical transmitter with optical output at 1550 nm and 9dBm optical power	8424450237434
237502	Optical transmitter with optical output at 1310 nm and 10dBm optical power	8424450240298

	Ref.	237501			237502		
Inputs		TERR	V	H	TERR	V	H
Frequency range	MHz	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
Input impedance	Ω	75			75		
Laser		MQW-DFB uncooled			MQW-DFB uncooled		
Wavelength	nm	1550 ±3			1310 ±3		
Optical output power	dBmW	9			10		
Input voltage	Vac	110 ... 230			110 ... 230		
Operating temperature	°C	-5 ... 45			-5 ... 45		





## OPTICAL RECEIVERS

Ref. 237540

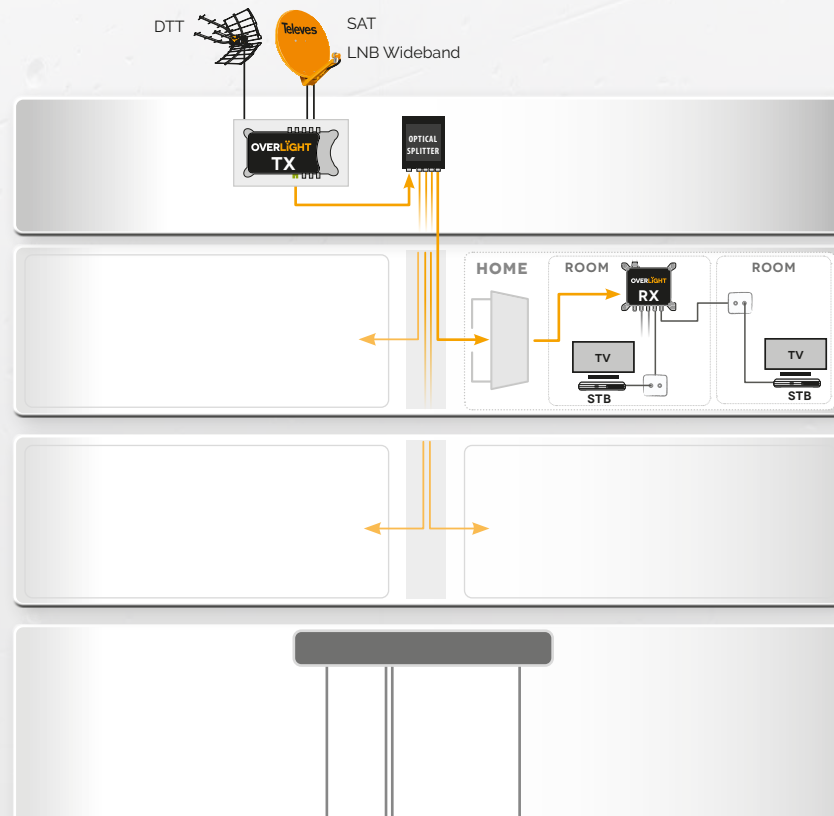
The Overlight Quattro optical receiver for Wideband and terrestrial satellite is in charge of capturing the optical TV signal (1100...1650nm) sent by the transmitters in order to process it and recover the original satellite and terrestrial TV signals. After recovery, it delivers the services to the users through its 4 RF outputs in Quattro mode: each connector provides one of the four TVSAT combinations of polarity and band.



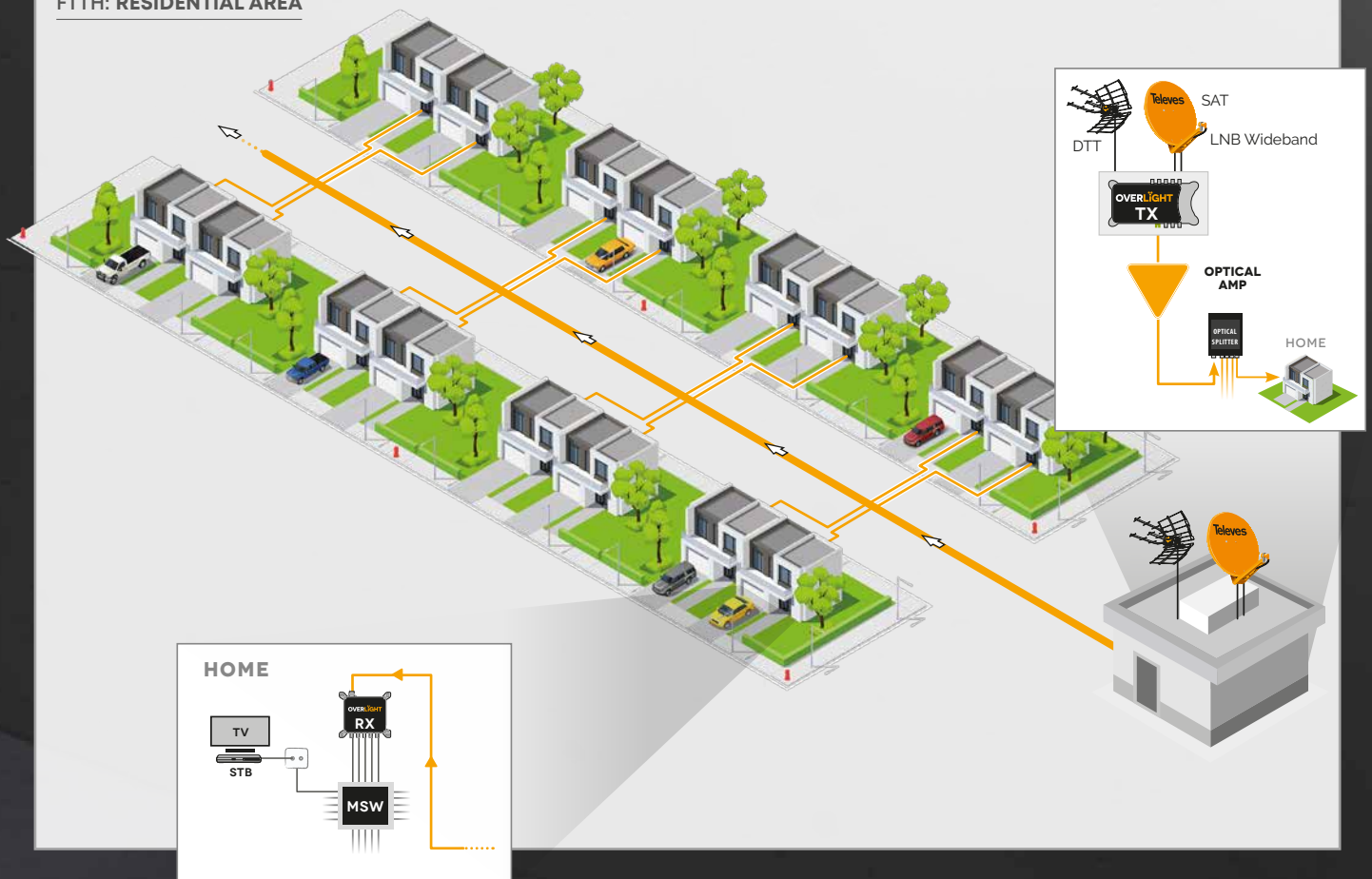
REF.	DESCRIPTION	EAN 13
237540	Overlight Optical Receiver Quattro "SC/APC" FM/DAB/UHF-SAT	8424450246689

		Ref.	237540
RF PARAMETERS	RF outputs		4 x LEGACY / 1 x TERR
	Frequency range	MHz	87 ... 694 / 950 ... 2150
	Impedance	Ohm	75
	Output level Legacy	dBμV	Channel. Typ. 69
	Output level TERR	dBμV	79 - 83
OPTICAL	Wavelength range	nm	1200 ... 1600
	Optical return losses	dB	>40
	Optical device	tipo	InGaAs
	Optical input level	dBm	-13 ... -6
GENERAL	RF connectors	Nº / tipo	4 x F
	Optical connectors	Nº / tipo	1 x SC/APC
	Output voltage	V <sub>DC</sub>	12 - 18
	Max. current	mA	750 @12V <sub>DC</sub> 570 @18V <sub>DC</sub>
	Operating temperature	°C	-5 ... +45
	Weight	g	400

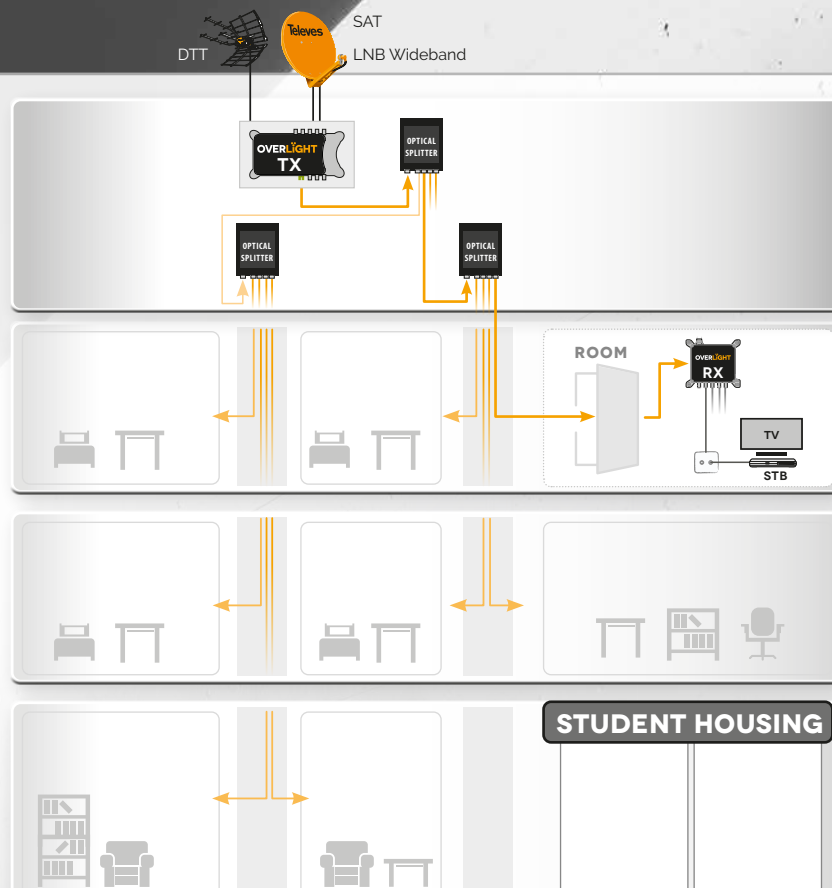
## Overlight Series: TV Distribution over Fiber optics

FTTH: PRIVATE BUILDING  
(DTT+SAT)

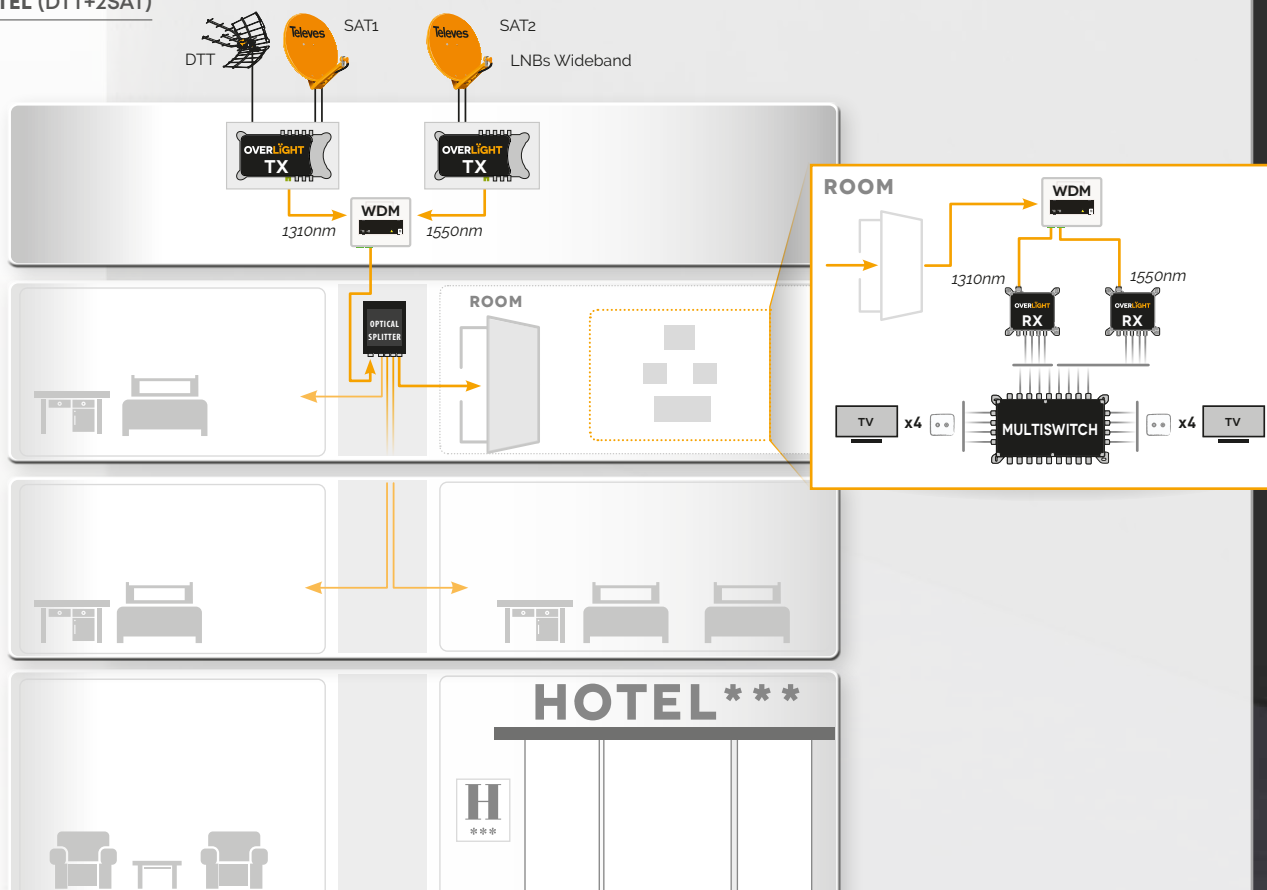
## FTTH: RESIDENTIAL AREA



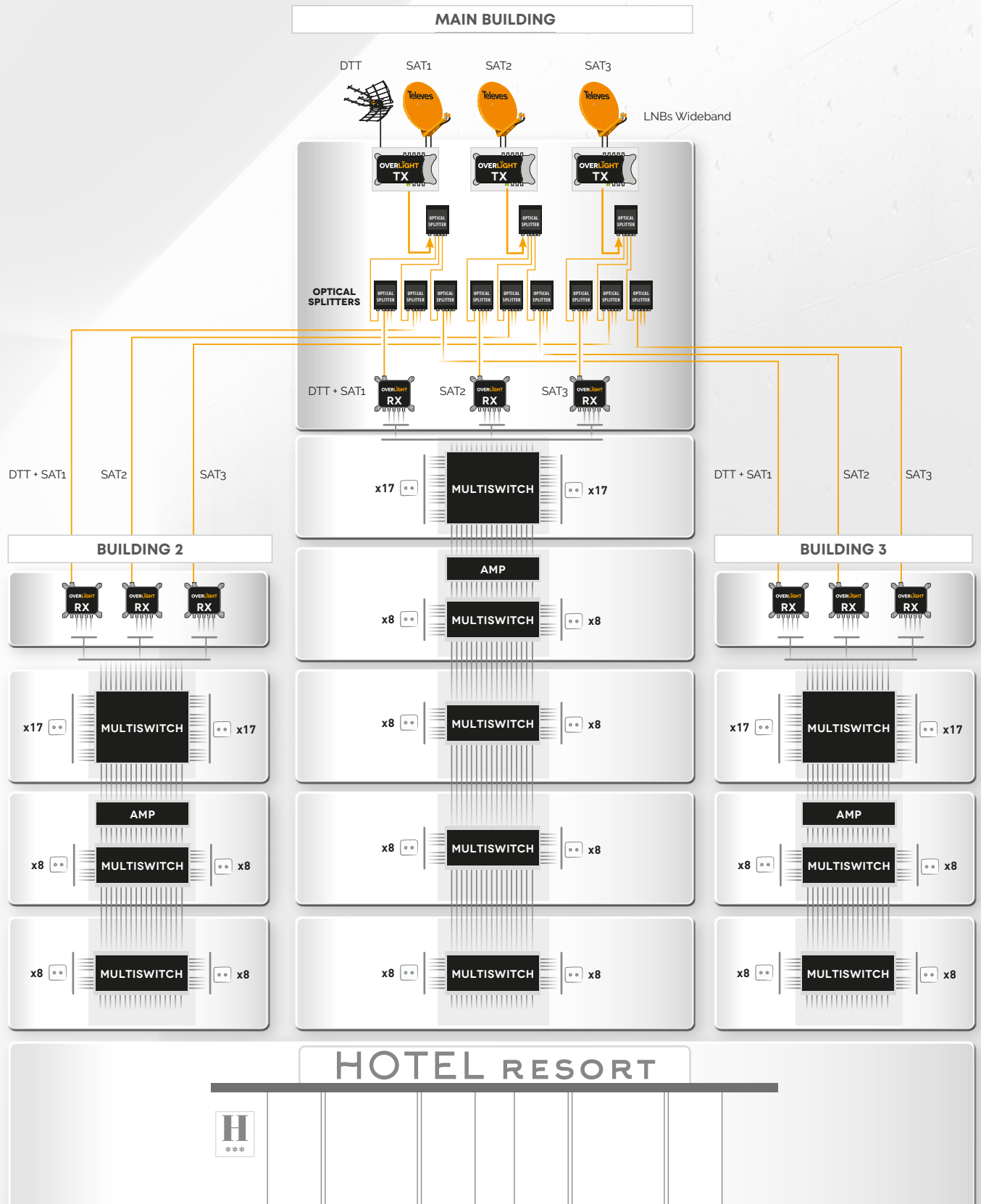
### FTTR: STUDENT HOUSING (DTT+SAT)



### FTTR: HOTEL (DTT+2SAT)





**FTTB: HOTEL COMPLEX**  
 (DTT+3SAT)




More information at:  
[en.televes.com/overlight](http://en.televes.com/overlight)

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