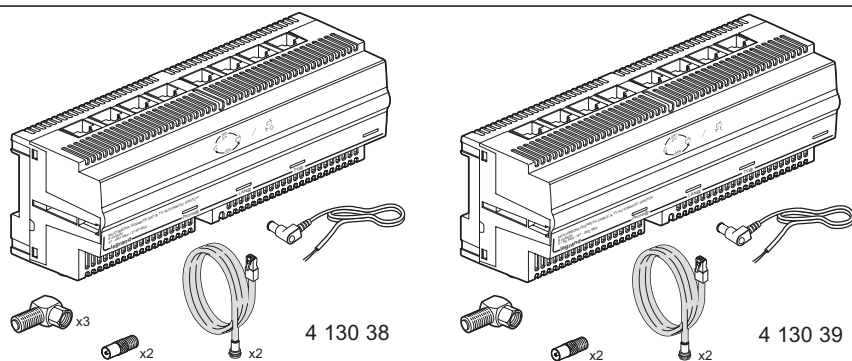


Gigabit and Satellite automatic switch unit

Catalogue number(s): 4 130 38/4 130 39



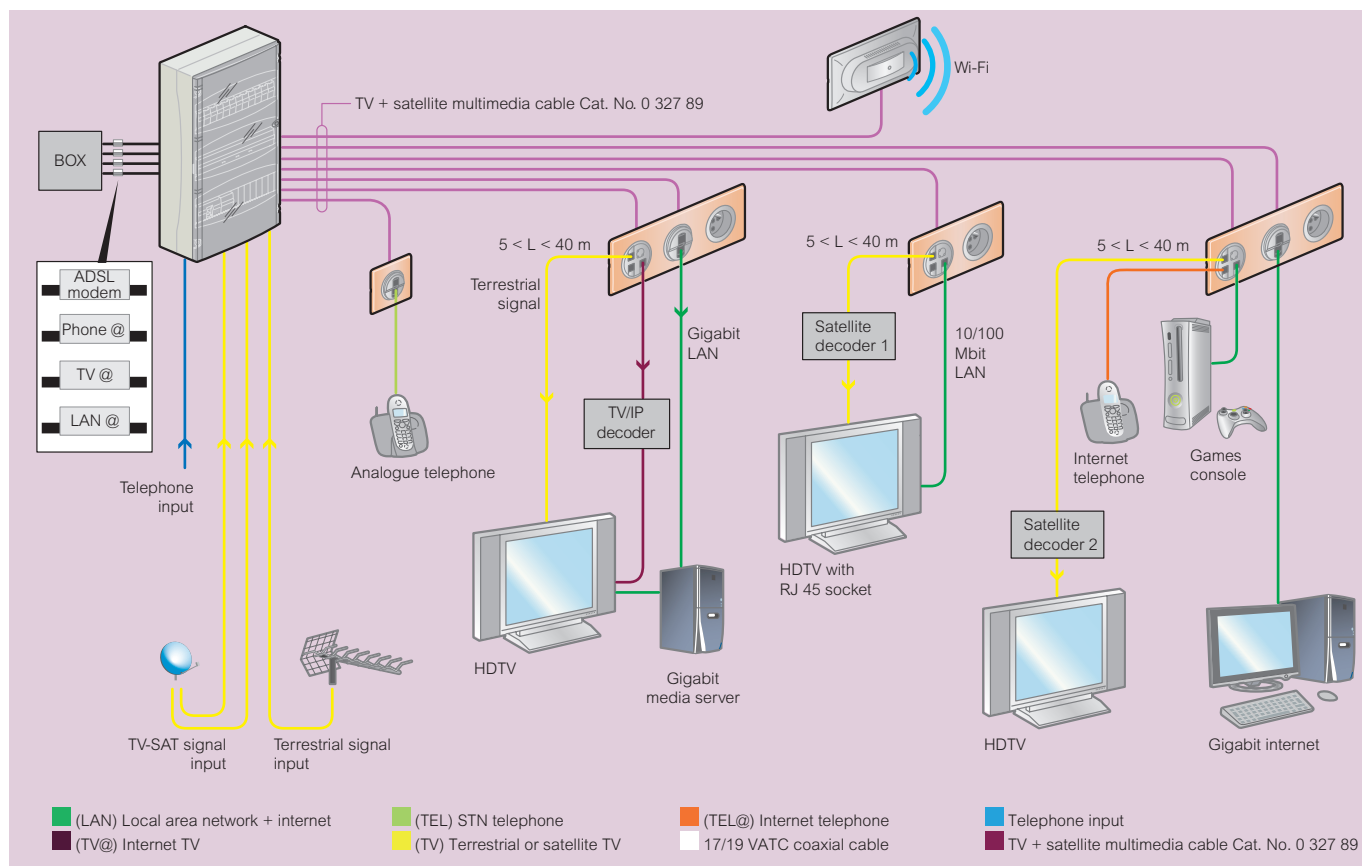
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4. Operating principles	2-3-4-5
5. Technical characteristics	5
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1. PRESENTATION

Distributes ADSL services from the operator box on 8 single RJ45 sockets and analogue/digital terrestrial TV and satellite TV on 2 decoders. IPv6 and IPv4 compatibility.
Only use power supply unit Cat. No. 4 130 17
Mounted on DIN rail.

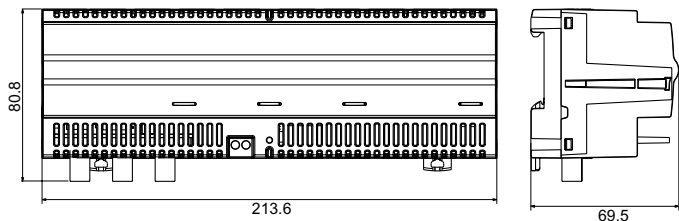


2. SELECTION CHART

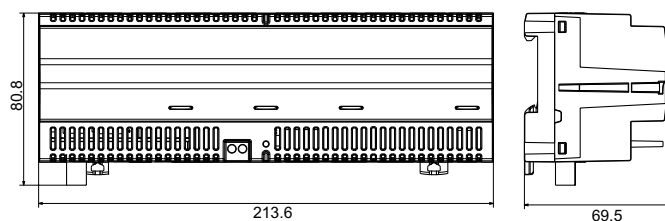
Description	Cat. Nos.	No. of modules	Weight (g)
Gigabit and satellite automatic switch unit	4 130 38	12	280
Cable automatic switch unit	4 130 39	12	270

3. OVERALL DIMENSIONS (continued)

4 130 38



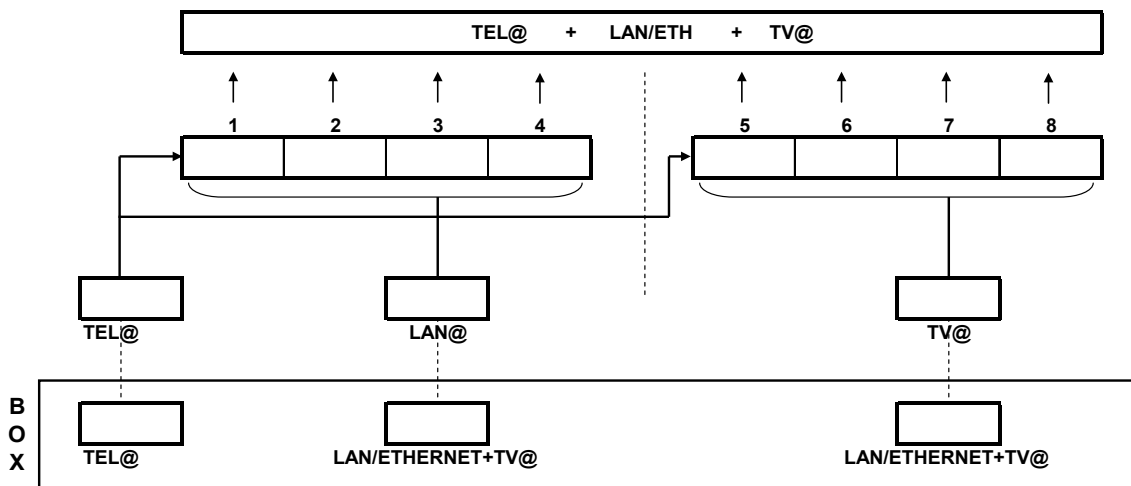
4 130 39



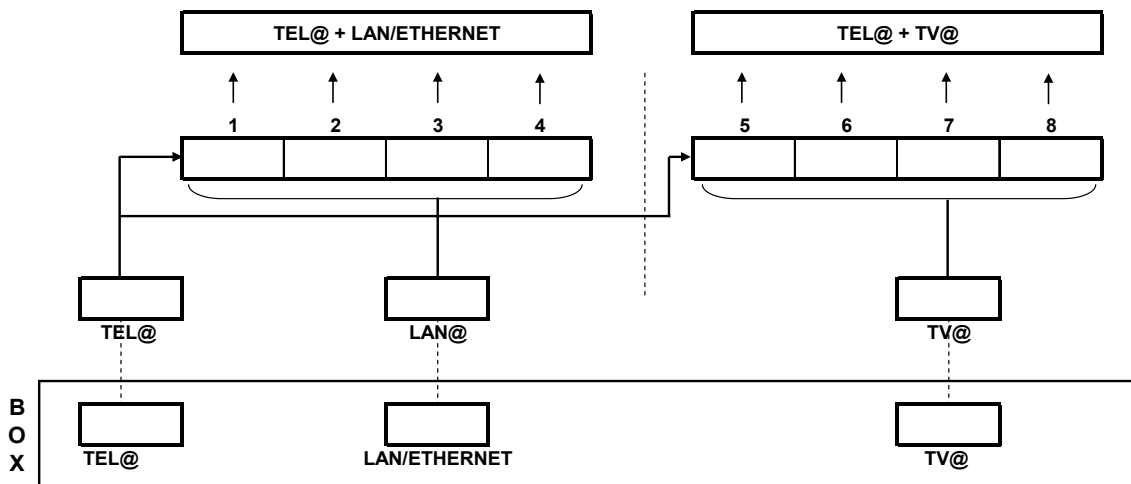
4. OPERATING PRINCIPLE

4.1 Principle of operation with the box

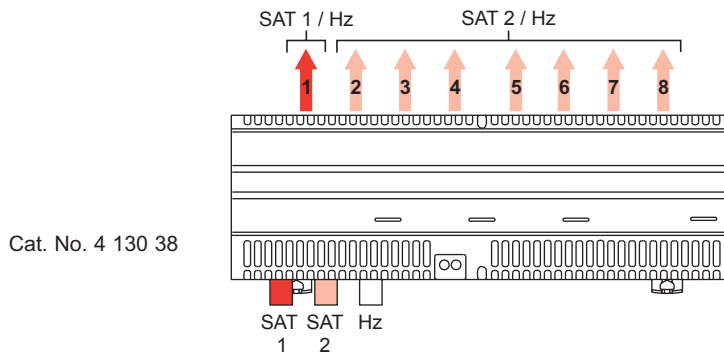
Installation diagram 1: box with mixed LAN@ and TV@ flows



Installation diagram 2: box with separate LAN@ and TV@ flows



4.2 Operating principle for terrestrial and satellite TV



Cat. No. 4 130 38

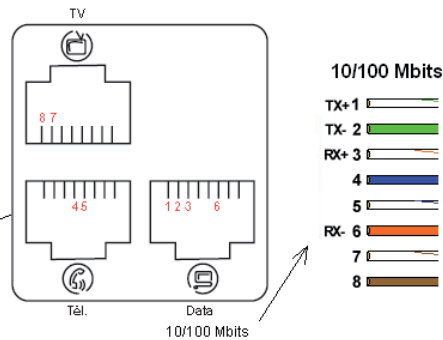
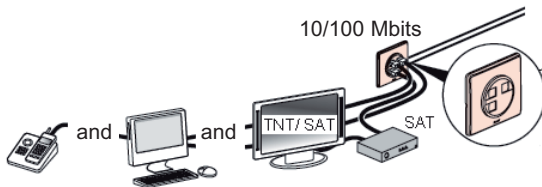
4 130 38								
	Analogue		Digital (DTT)		Analogue (FM: PAL/SECAM*)		Digital (DVB-S /DVB-S2)	
Required signal quality (unit input)	C/N min: 47 dB		C/N min: 27 dB BER min: 9.9E-05		C/N min: 17 dB		C/N min: 16 dB BER min: 9.9E-04	
Signal levels (normal) or unmeasured signal slope at unit input)	60-67 dBµV Correct operation: - between 5 m and 40 m for the 7 outputs RJ2 to RJ8 - not applicable for output RJ1		50-60 dBµV Correct operation: - between 5 m and 40 m for the 7 outputs RJ2 to RJ8 - between 5 m and 30 m for output RJ1		68-75 dBµV Correct operation: - between 10 m and 40 m for the 7 outputs RJ2 to RJ8 - between 5 m and 30 m for output RJ1			
Optimum signal levels (according to signal slope at unit input)	Min. (dBµV)	Max. (dBµV)	Min. (dBµV)	Max. (dBµV)	Min. (dBµV)	Max. (dBµV)	Min. (dBµV)	Max. (dBµV)
Slope = -7dB	64	71	53	62	68	75	68	75
Slope = -6dB	64	71	54	61	68	75	68	75
Slope = -5dB	64	70	54	61	68	74	68	74
Slope = -4dB	64	70	54	60	68	74	68	74
Slope = -3dB	64	69	54	59	68	73	68	73
Slope = -2dB	64	68	54	59	68	72	68	72
Slope = -1dB	64	68	54	58	68	72	68	72
Slope = 0 dB	64	67	54	57	68	71	68	71
Slope = 1 dB	63	66	53	58	67	72	67	72
Slope = 2 dB	62	68	52	58	66	72	66	72
Slope = 3 dB	61	68	51	59	65	72	65	72
Slope = 4 dB	60	68	51	59	64	72	64	72
Slope = 5 dB	59	69	51	59	63	73	63	73
Slope = 6 dB	58	69	51	60	62	73	62	73
Slope = 7 dB	57	69	51	60	62	74	62	74
Special precautions	Do not exceed 75 dBµV at the input, irrespective of the input frequency. Maintain a max. difference in level of 7 dB (max.-min.) on the terrestrial spectrum.		Do not exceed 70 dBµV at the input, irrespective of the input frequency. Maintain a max. difference in level of 7 dB (max.-min.) on the terrestrial spectrum.		Do not exceed 75 dBµV at the input, irrespective of the input frequency. Maintain a max. difference in level of 7 dB (max.-min.) on the satellite spectrum.			

4 130 39						
	Analogous		Digital (DIT)		Cable (DVB-C)	
Required signal quality (unit input)	C/N min: 47 dB		C/N min: 27 dB			
			BER min: 9.9E-05			
Signal levels (normal) or unmeasured signal slope at unit input)	67-69 dB μ V Correct operation between 5 m and 40 m		55-69 dB μ V Correct operation between 5 m and 40 m		54-59 dB μ V Correct operation between 5 m and 40 m	
Optimum signal levels (according to signal slope at unit input)	Min. (dB μ V)	Max. (dB μ V)	Min. (dB μ V)	Max. (dB μ V)	Min. (dB μ V)	Max. (dB μ V)
Slope = -7 dB	67	74	55	63	54	63
Slope = -6 dB	67	73	55	63	54	63
Slope = -5 dB	67	72	55	62	54	62
Slope = -4 dB	67	71	55	61	54	61
Slope = -3 dB	67	71	55	61	54	61
Slope = -2 dB	67	70	55	60	54	60
Slope = -1 dB	67	69	55	59	54	59
Slope = 0 dB	67	69	55	59	54	59
Slope = 1 dB	66	69	54	59	53	59
Slope = 2 dB	65	69	53	59	52	59
Slope = 3 dB	64	69	52	59	51	59
Slope = 4 dB	63	69	51	59	50	59
Slope = 5 dB	62	69	50	59	49	59
Slope = 6 dB	61	69	49	59	48	59
Slope = 7 dB	61	69	49	59	48	59
Special precautions	Do not exceed 75 dB μ V at the input, irrespective of the input frequency. Maintain a max. difference in level of 7 dB (max.-min.) on the terrestrial spectrum.		Do not exceed 70 dB μ V at the input, irrespective of the input frequency. Maintain a max. difference in level of 7 dB (max.-min.) on the terrestrial spectrum.		Do not exceed 70 dB μ V at the input, irrespective of the input frequency. Maintain a max. difference in level of 7 dB (max.-min.) on the cable spectrum.	

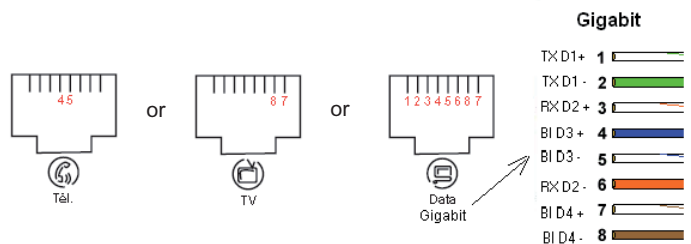
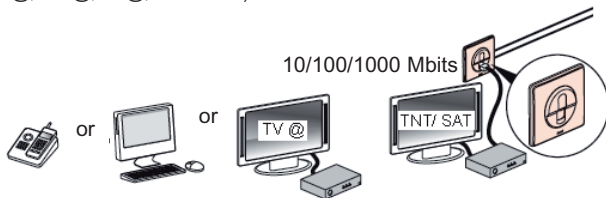
4.3 Operating principle for triple and single sockets

Triple and single RJ45 socket operation with automatic switch units

Triple socket: 4 130 38
Using 3 media simultaneously
(Tel@ + Lan@ + TV@ + TV/SAT)



Single socket: 4 130 39
Using single medium
(Tel@, Lan@, TV@, TV or SAT)



5. TECHNICAL CHARACTERISTICS

5.1 Main characteristics

- Eco-design
- RoHS compliant
- Solution for the home/SOHO
- 3 speeds on all 8 ports: 10/100/1000 Mbps
- Genuine Plug & Play installation
- Auto crossover for all ports
- Auto negotiation for all ports
- Automatic updating of MAC addresses
- Product can be used in various environments
- Full/half-duplex for Ethernet/Fast Ethernet speeds
- Jumbo frame up to 10 Kbytes
- RAM: 1 Mbit
- MAC address: 1 K
- Saving and retransmission

5.2 Characteristics of the analogue/digital terrestrial TV/satellite TV function

- Analogue/digital terrestrial/satellite TV splitter
- Transmission distance:
 - 5 to 40 m for analogue and digital terrestrial
 - 5 to 40 m for satellite

5.3 LEDs

- Green LED: power on
- White LED: telephone line connected and functioning correctly
- White LED: LAN input present
- White LED: TV input via ASDL
- No LEDs on the port outputs to save energy

5.4 Mechanical characteristics

Plastic casing: PC RAL 7035
IP20 - IK04
Tensile resistance on DIN rail: 100 N

5.5 Electrical characteristics

Cat. Nos.	At 220 VAC	At 9 VDC
4 130 38	131 mA 14.51 W Cos φ: 0,5	1.41 A
4 130 39	131 mA 14.51 W Cos φ: 0,5	1.41 A

Automatic detection and assignment of the medium connected to the wall socket.

Ethernet Gigabit switch (2x4 10/100/1000 Mbps outputs).

Data rate compatible with IPTV, HDTV as well as multi-TV offers, and suitable for very high fibre optic rates.

Green Ethernet component (power consumption adjusted to exact requirement). IP V6 Ready.

5.6 Climatic characteristics

Operating temperature: + 5°C to + 40°C
Storage temperature: - 25°C to + 70°C

6. STANDARDS

IEEE802.3 10base-t Ethernet
IEEE802.3u 100base TX Fast Ethernet
IEEE802.3ab 1000base T Gigabit Ethernet
IEEE802.1X flow control
IEEE22.2.4.1.5 power down compliance to save energy
EN60728-1 cable networks for television signals, sound signals and interactive services
IEC 60728-1
EN 500 90-2-2
EN 60950

7. CERTIFICATIONS

RoHS directive
CE marking
SELV marking