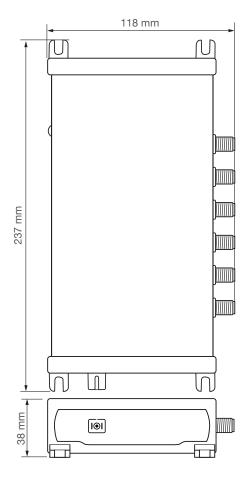


SCF516/6

User manual

Optical Receiver 2 Satellites orbital position 6 Outputs

- Reception of 2 satellites and terrestrial feed
- 6 Legacy/dSCR DTT/DAB/FM outputs
- Output booster for satellite signals
- Optical link monitor Led
- A.G.C. for each output









Rel. 1.0

MODEL		SCF516/6
OPTICAL INPUT		1
RF OUTPUTS		6
OPTICAL		
OPERATION WAVELENGTHS	nm	1.270 - 1310 - 1330 - 1.490 - 1550
INPUT POWER RANGE	dBm	-14 0
INPUT CONNECTOR TYPE		SC/APC
RETURN LOSS	dB	≥40
SATELLITE		
OUTPUT BANDWIDTH	MHz	950 2150
SCR/dCSS OUTPUT LEVEL	dΒμV	85 Booster OFF / 94 Booster ON
LEGACY OUTPUT LEVEL	dΒμV	75 Booster OFF / 80 Booster ON
SATELLITE CONTROL STANDARDS		Universal LNB Voltage & Tone / DiSEqC 1.0 / DiSEqC 2.0
SCR/dCSS/DSCR PROTOCOLS		EN50494 / EN50607 / SKY UK (AUTO-SWITCH)
AVAILABLE USER BAND FREQUENCY PLANS		SKY ITALIA - SKY UK
TV TERRESTRIAL / FM / DAB		
OUTPUT BANDWIDTH	MHz	40 790
MAXIMUM OUTPUT LEVEL MIX OUT	dΒμV	≥75
OUTPUT LEVEL ADJUSTMENT	dB	020
OTHERS		
ISOLATION BETWEEN SATELLITE/TERRESTRIAL	dB	≥ 40
ISOLATION V / H	dB	> 30
OUTPUT RETURN LOSS	dB	> 10
DC INPUT VOLTAGE RANGE	V	12 20
MAXIMUM CONSUMPTION	W	16
OPERATING TEMPERATURE	°C	0 50
DIMENSIONS	mm	237 x 118 x 38

DESCRIPTION OF SYMBOLS AND ELECTRICAL SAFETY					
CE	The equipment complies with the CE requirements				
	The equipment is designed for indoor use only				
	Equipment grounding terminal				
	This symbol indicates that the equipment complies with the class II equipment safety requirements				
CAUTION	To avoid the risk of electric shock, do not open the equipment.				
RoHS 2002 95 EC	The equipment is compliant with RoHS 2011/65EU				
	Dispose according to local authorities recycling processes				

Safety instructions

- 1. Read carefully these instructions
- 2. Keep these instructions
- 3. Heed all warnings
- 4. Follow all instructions
- 5. Do not expose this apparatus to extreme temperatures
- 6. Do not install this apparatus near water or expose to rain and moisture
- 7. Place the apparatus in a dry and well-aired location
- 8. Install the unit on a vertical wall, or in a waterproof cabinet with a minimum IP55 rating, and fix it safely using the provided fixing plugs
- 9. Do not install the unit lying flat or on its top
- 10. Connect the power adapter cord to a detachable power supply socket
- 11. Unplug the apparatus during lighting storms or when unused for long time
- 12. Only use accessories specified by the manufacturer
- 13. Do not remove the cover without disconnecting from the mains first
- 14. Ambient temperature should not be lower than 0°C and higher than 50°C
- 15. Please allow air circulation around the apparatus



Installation warnings

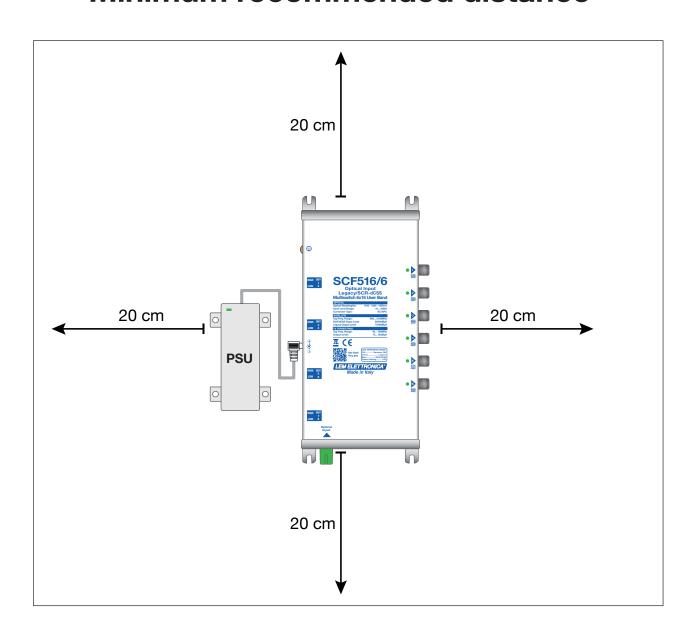
Place the apparatus and the power supplier in a dry and well-aired location

Install the unit on a vertical wall, or in a waterproof cabinet with a minimum IP55 rating, and fix it safely using the provided fixing plugs

Use only the power supplier YS25-1501250 provided with the amplifier.

The use of not-original power suppliers determines the not-compliance of the product and can cause malfunctions and void the warranty

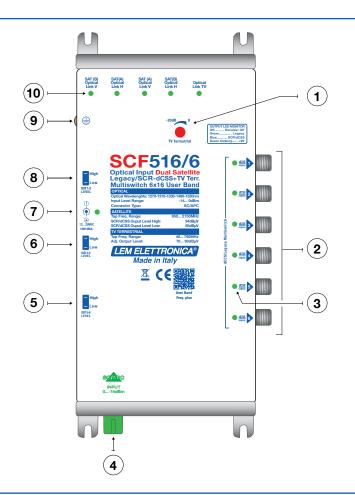
Minimum recommended distance



SCF516/6 DESCRIPTION

Box Content

- 01 Optical Multiswitch SCF516/6
- 01 Power supplier YS25-1501250 (Input: 100-240Vac 0,5A Max / Output: 15Vdc 1,25A Max)
- 08 6x30mm fixing plugs with 4,5x40mm screws
- 01 User manual
 - 1 Terrestrial signals output level adjuster
 - (2) Legacy/dSCR-Terrestrial Outputs
 - (3) SCR/dCSS Legacy output Led status
 - 4 Optical SC/APC input
 - (5) Satellite booster ON/OFF outputs (5) and (6)
 - (6) Satellite booster ON/OFF outputs (3) and (4)
 - (7) DC input 12... 20 Volt + Power status Led
 - 8 Satellite booster ON/OFF outputs (1) and (2)
 - (9) Ground clamp
 - (10) Optical link Status Led



The optical signal level at the input of the multiswitch **SCF516/6** must lie between 0dBm and -14dBm.



Optical signals higher than 0dBm can damage the SCF516/6 multiswitch.

In PON with less than 4 optical points add a proper optical attenuator.

MONITOR LED DESCRIPTION

DC Input

Off= No power

Green= Power

Optical Link

Off= No optical link

Green= Optical link

Outputs

Multiswitch mode selected

Off= any voltage from set-top-box

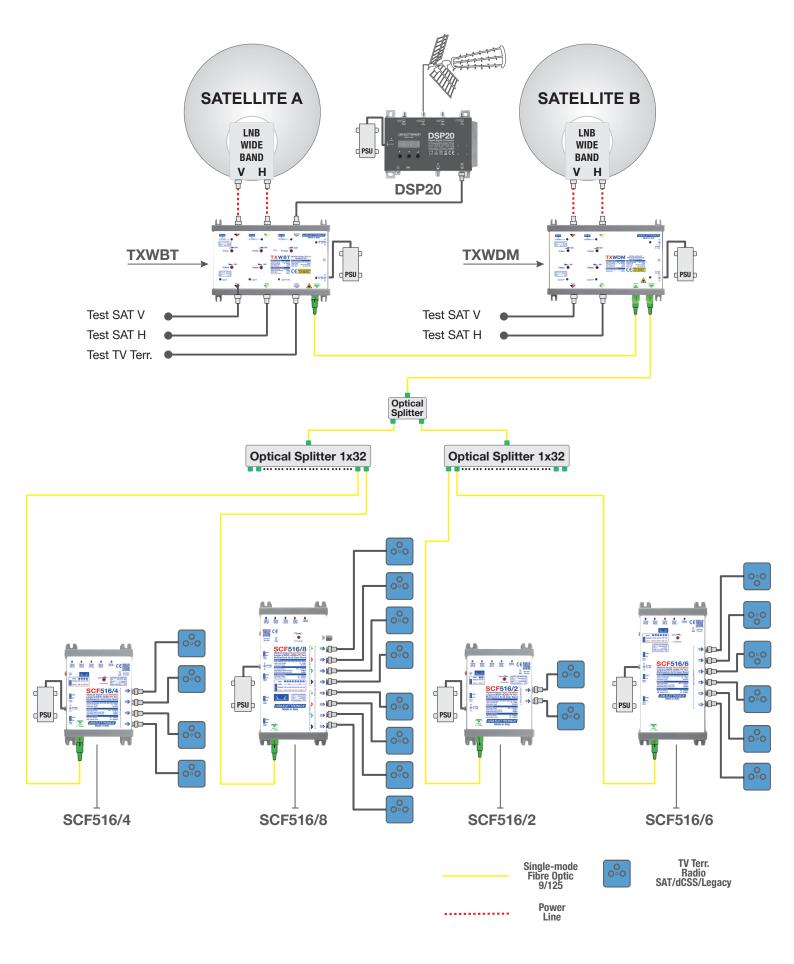
Green blinking= Voltage from set-top-box < di 9 Volt

Green= Legacy mode (auto-switch)

Blue= SCR/dCSS mode (auto-switch)

Quattro mode selected

Green for all outputs



Distribution of two satellite and terrestrial feed (DTT, FM, DAB) over a single-mode optical fibre

The headends **TXWBT** and **TXWDM** convert and transmit over a single-mode fibre optical cable the terrestrial feeds and all the transponders of two satellite received from two Wide Band LNB. The optical multiswitches of the **SCF516** series receive and converted into RF to be ready for a single or multi-dwelling coaxial distribution. Each **SCF516** series multiswitch output provides terrestrial and satellite signals and fully supports Diseqc controls in legacy and SCR/dCSS standards.

