



CABLE RANGER mini

CABLE RANGER mini
+ fibre option OP-0CR-PS

CABLE RANGER

CABLE RF functions

	From 5 to 1800 MHz	From 5 to 1800 MHz	From 5 to 1700 MHz
Tuning range	From 5 to 1800 MHz	From 5 to 1800 MHz	From 5 to 1700 MHz
Covers DOCSIS 3.0 / 3.1 band?	✓	✓	✓
SCAN	✓	✓	✓
TILT	✓	✓	✓
RF power level	✓	✓	✓
Spectrum analyzer	✓	✓	✓
QAM digital	✓	✓	✓
Analog TV analysis	✓	✓	✓
Input DC/AC voltmeter	✓	✓	✓
External cablemodem connection			✓
Upstream test generator			✓
Built-in DOCSIS 3.0 cablemodem			✓

OPTICAL FIBRE functions

		From 1100 to 1700 nm	From 1100 to 1700 nm
Wavelengths		From 1100 to 1700 nm	From 1100 to 1700 nm
Optical power meter		✓	✓
Optical to RF converter (45-1700 MHz)		✓	✓
SCAN		✓	✓
TILT		✓	✓
Spectrum analyzer		✓	✓
DOCSIS analysis		✓	✓
TV analysis		✓	✓

Other functions and features

Screen shots	✓	✓	✓
Photo gallery	✓	✓	✓
Datalogger	✓	✓	✓
Ethernet	✓	✓	✓
USB	✓	✓	✓
Web browser			✓
Touch screen	5"	5"	7"
Dimensions (W. x H. x D.)	177 x 117 x 39 mm	177 x 117 x 39 mm	290 x 185 x 65 mm
Weight	700 g	700 g	1,6 kg





SPECIFICATIONS	CABLE RANGER mini	CABLE RANGER mini +optical option OP-0CR-PS	CABLE RANGER
SPECTRUM ANALYZER			
Frequency	From 5 to 1800 MHz		From 5 to 1700 MHz
Tuning range	Tuning range covers DOCSIS 3.0 and DOCSIS 3.1 requirements		
Resolution	10 kHz		
Resolution bandwidth	230 kHz, 2 MHz		
LEVEL MEASUREMENT			
Dynamic range	From -50 dBm to 60 dBmV		
Measuring range	50 dB		
Resolution	0.1 dB		
Accuracy	±2 dB		
Input impedance	75 Ω		
Units	dBm, dBμV, dBmV		
FREQUENCY TUNING MODE			
Audio demodulation	Analog FM		
Level	From -50 dBm to 60 dBmV		
C/N	>50 dB for level >10 dBm		
HUM	From 1 to 15%. Accuracy ±1% (for CW carriers)		
DIGITAL CHANNEL TUNING MODE			
QAM systems compatible modulations	DVB-C, DVB-C2, ITUJ-83 Annex B and C		
Other modulations	DVB-T, ISDB-T, ATSC	DVB-T	
Power measurements	From -40 dBmV to 60 dBmV by integration		
Lock range	From -20 dBm to 60 dBmV		
SR	From 1000 to 7000 ksym/s		
MER	From 24 dB to 42 dB for QAM16/32/64/128/256 and QPSK. Accuracy ±2 dB		
BER	Pre BER (before RS): From 10 E ⁻² to 10 E ⁻¹⁰ / Post BER (after FEC): From 10 E ⁻² to 10 E ⁻¹⁰		
Constellation diagram	For all systems with x2, x4 zoom		
FUNCTIONS - RF CABLE	Band from 5 to 1800 MHz		Band from 5 to 1700 MHz
	SCAN, TILT, RF power level, Spectrum analyzer, Digital QAM, analog TV analysis, Input DC/AC voltmeter		
			External cablemodem connection Upstream test generator Built-in DOCSIS 3.0 cablemodem
FUNCTIONS - OPTICAL FIBRE (1100 to 1700 nm)	Optical power meter, Optical-RF converter (from 45 to 1700 MHz) SCAN, TILT, Spectrum analyzer, DOCSIS analysis and TV analysis		
FUNCTIONS - GENERAL	Screen shots, Photo gallery, Datalogger, Ethernet		
			Web browser
OPTICAL POWER METER AND RF CONVERTER			
Optical band	From 1100 nm to 1700 nm		
RF conversion band	From 45 to 1700 MHz		
Connector	SC-APC		
Dynamic range	From -50 to 10 dBm (accuracy 0.5 dB)		
Calibrated wavelength	1310 nm, 1490 nm, 1550 nm, 1625 nm		
GENERAL SPECIFICATIONS			
Inputs and outputs	RF input (F male socket), Ethernet		
	USB Type A	USB Type A, mini USB	
	Entrada óptica (SC-APC)		
Monitor	5" touch screen color TFT		7" touch screen color TFT
POWER SUPPLY			
Internal battery	Smart battery 7.2 V / 6.6 Ah Li-Ion. Recharging time 3 h up to 80% (instrument off)		
External voltage	12 V DC		
Battery operation time	> 4 hours in continuous mode		> 4 hours in continuous mode
Consumption	12 W		40 W
ACCESSORIES	DC power adapter + cord, Car lighter adapter, F(f)-F(f) input adapter, Quick reference guide, Transport case		
			Carrying bag
MECHANICAL FEATURES			
Dimensions	177 (W.) x 117 (H.) x 39 (D.) mm		290 (W.) x 185 (H.) x 65 (D.) mm
Weight	700 g		1.6 kg