



HANDHELD Field Strength Meter

Perfect evolution is not making a smaller meter.

Perfect evolution is making a Digital Processing meter in a small format.

The Digital Processing engine of the H45 field strength meter enables us to unveil details of the radioelectric spectrum that were unimaginable to date...

Handheld

H45 with Digital Processing

genetically Perfect



PRODUCT RANGE

REF. DESCRIPTION

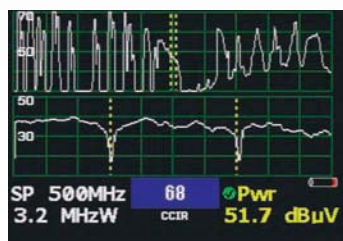
5990	H45 Compact
5991	HD Option (H45 Compact)
5992	H45 Advanced

Captures, measures and processes **up to 20MHz of bandwidth in less than 10ms**, giving the installer intelligently simple functionality.

EXCLUSIVE FUNCTIONALITY



COMBO MODE IN REAL TIME



ZOOM SPECTRUM



QUALITY CHECKMARKS



SCAN&LOG TERR/SAT



FIELD STRENGTH METERS

VERSION		H45 Compact (ref. 5990)	H45 Advance (ref. 5992)	
Bands	Return Channel (5 MHz-47 MHz) Measurement and Demodulation of Analog Channels, DVB-T and DVB-C	X	YES, Continuous Band (without gaps) from 5MHz to 2.500MHz	
	Terrestrial (47 MHz-880 MHz) Measurements and Demodulation DVB-T, DVB-C and DVB-H	✓		
	Radio FM (80 MHz-110 MHz) Measurements and Demodulation	✓		
	GSM (880 MHz-950 MHz) Measurements in Spectrum Mode	X		
	Satellite (950 MHz-2220 MHz) Measures Analog Satellite. Measurements and Demodulation of DVB-S y DVB-S2	DVB-S2 with HD OPTION (ref.5991)		
	WIFI (2220 MHz-2500 MHz) Measurements in Spectrum Mode	X		
	ANALOG Signal Measurements (with DIGITAL PROCESSING Technology)	Level with Colour-coded Level Scale representing signal state		
Audible signal according to Level and CN			✓	
V/A and C/N (without losing video visualisation)		CN 45dB	CN 52dB	
Synch Impulse: Real representation			YES, Terrestrial	
Video Line Representation (user defined, with off-set and zoom)		X	✓	
Automatic C/N			✓	
Referenced C/N		X	In Spectrum Mode	
TV Norms			PAL B/G,D/K,I, SECAM B/G,D/K,L	
Electromagnetic Field Measurements			✓	
Power			15-130 dBµV	
DIGITAL Signal Measurements (with DIGITAL PROCESSING Technology)	Automatic C/N		✓	
	Referenced C/N	X	In Spectrum Mode	
	Audible signal according to Power and CN		✓	
	Impulse Channel Response in COFDM (Echoes)	HD OPTION (ref.5991)	✓	
	Constellation QAM, DVB-S2 (8PSK or QPSK), COFDM (with manual carrier selection)	HD OPTION (ref.5991)	✓	
	Packet Error Rate	X	✓	
	NICAM	X	✓	
	QAM	BER		9.9E-2 - 1.0E-8
		MER		✓
		Att. Auto.		✓
		PWR		40-125 dBµV
		Symbol Rate		700 - 7.200 Kbaud
	COFDM	cBER		9.9E-2 - 1.0E-6
		vBER		1.0E-4 - 1.0E-8
		MER		✓
		PWR		40-125 dBµV
		Auto Offset Detection		✓
	QPSK (with Q.A.L.technology)	cBER		1.0E-2 - 1.0E-6
		vBER		1.0E-4 - 1.0E-8
MER			✓	
PWR			40-120 dBµV	
Symbol Rate			AUTO, from 1 - 45Mbaud	
Code Rate			AUTO, 2/3, 3/4, 5/6, 7/8, 1/2	
8PSK - DVB S2	Link Margin		(-8.3) - 20dB	
	cBER		1.0E-2 - 1.0E-8	
	BCH BER		5.0E-2 - 1.0E-8	
	MER		✓	
	Att. Auto.		✓	
	PWR		40 - 120 dBµV	
	Symbol Rate		1 - 30 Mbaud	
	Code Rate		AUTO (supports 1/4, 1/3, 2/5, 3/5, 1/2, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10)	
MPEG	Decodes Free-to-Air MPEG-2 with Standard Resolution		✓	
	Number of Services, Service Selected, Service Audios		✓	
	NID, VPID, APID, SID (with Network Descriptor)		✓	
	Video Resolution, Audio Type and Language		✓	
	HD Identification		✓	
	Analyses Transport Events	X	✓	

VERSION			H45 Compact (ref. 5990)	H45 Advance (ref. 5992)	
ANALYSER Mode (with DIGITAL PROCESSING Technology)	Span	Terrestrial	5, 10, 20, 50, 100, 200, 500 and FULL	100KHz, 200KHz, 500KHz, 1M, 2M ... 1GHz and 2GHz	
		Satellite	5, 10, 20, 50, 100, 200, 500 and FULL	200KHz, 500KHz, 1M, 2M ... 1GHz and 2GHz	
		Manually configurable in 1MHz steps	X	✓	
	RBW	Terrestrial		100, 200, 800 and 3200 KHz	Configurable from 300Hz to 6,4 MHz
				User selectable: NO	
			Automatic depending on Span: YES		
		Satellite		200, 800 y 3200 KHz	
				User selectable: NO	
		Auto based on Span: YES			
	B.E.R. measurement in Spectrum		X	✓	
	Vertical Reference Level		config 5 and 10 dB		config 1, 2, 5, 10 dB
	Saturation Warning signal (audible sound and spectrum colour change)				✓
	REAL-TIME Sweep		< 250ms		< 10ms
	Screen Refreshing speed		<250ms		<100ms
	Hold				✓
Marks		One		Up to 3	
SPECTRUM ZOOM within the same screen (Spectrum 1 is variable in span. Spectrum 2 is the zoom of the central channel in Spectrum 1)		X		✓	
Visualisation of 3 CONFIGURABLE TRACES		X		✓	
EVENT TRIGGERS to detect Pulsing Signals		X		✓	
Represents Background Noise				✓	
Configurable Detectors for Sampling Digital signals		X		✓	
Variable VBW		X		✓	
Powering LNBs	Voltage, Extra burst (14 V, 19.5V to compensate cable losses)		13/18/24V		
	22 KHz tone		✓		
	DiSEqC and SCR		✓		
	Motor Control		X		✓
Battery	Type / Autonomy		Litio-Ion (>4 hours in Low Consumption mode)		
	Battery status indicator (icon and tone)		✓		
General Characteristics	Dynamic Margin	Terrestrial	50 dB	60 dB	
		Satellite	45 dB	55 dB	
	Satellite Frequency Selection		IF, Real RF, Channel and Memory		
	Units		dBµV, dBmV, dBm and dBµV/m		
	Automatic shut-down		YES (programmable 1- 59 min.)		
	Languages		English, German, Spanish, French, Italian and Portuguese		
	Menu and Measurements Presentation		On-Screen-Display (OSD)		
	All measurements in one screen		✓		
	QUALITY CHECKMARKS		✓		
	COMBO MODE IN REAL-TIME (3 windows - spectrum, all measurements and video image)		✓		
	SD		X		✓
	Rotary-Capacitive Selector		✓		
	Teletext		Analog and Digital		
	SW upgrades through USB port		✓		
	USB and SCART interfaces		✓		
Programmed Measurements	Memories		250	1000	
	Macros		100 macros with 250 memories each		
	Datalogs		✓		
	Stored Measurement Capacity		Up to 30.000		
	Download Datalogs into SD		X		✓
	Create Channel Plans or Macros from SCANS		✓		
	Outlet type selection when executing automatic measurements		✓		
	Classification of Datalogs by Installation or Outlets		✓		
H45 Management (PC-applications)	GRAPH LOGGER		X		✓
	Data Logger		✓		
	Graph Logger		X		✓
Miscellaneous	Mem Tools		✓		
	DIGITAL PROCESSING Technology		✓		
	SCAN & LOG with Automatic Channel Identification	Terrestrial	✓		
		Satellite	✓		
	Q.A.L. (QPSK Auto Lock) Technology		✓		
	HW and SW upgrades to accommodate newest features/technologies without changing meters		✓		
Capacitive Technology to make knob navigation faster and more precise		✓			