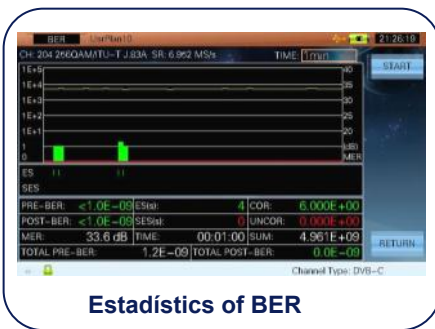
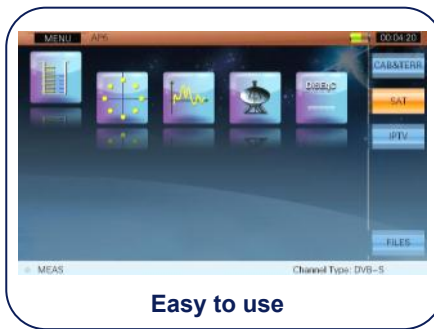




- * All in one: QAM (J.83A/B/C/D), 8VSB, DVB-T/H, ISDB-T/Tb, DVB-S/S2, IPTV
- * Digital/Analog TV and Satellite TV analysis.
- * Fast and advance spectrum analysis with 5 ~ 2150 MHz frequency span
- * DSP Technology to support different Video decoding: MPEG-2 , MPEG-4 and H.264 for 1080i, 720p and 576i, support PAL/NTSC/SECAM.
- * DVB-CI module (Conditional Access) for encrypted channels.
- * TS-ASI input and output
- * TS record and TS replay, Transport Stream analyzer.
- * GPS option.
- * HDMI, LAN and USB interface
- * High resolution 7" TFT LCD with bright display for outdoors use.
- * W245xH194xL105, light weight.



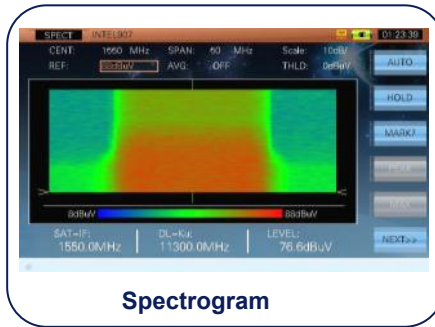
Estadistics of BER



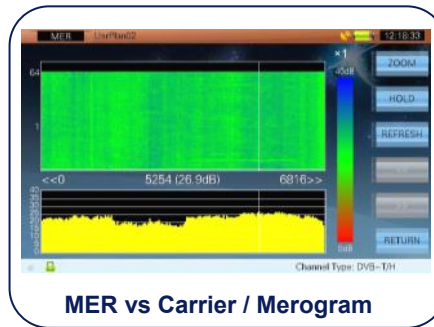
Easy to use



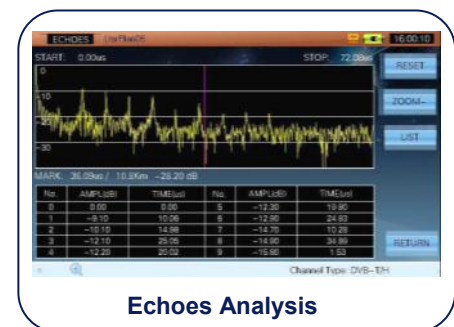
Alignment with GPS



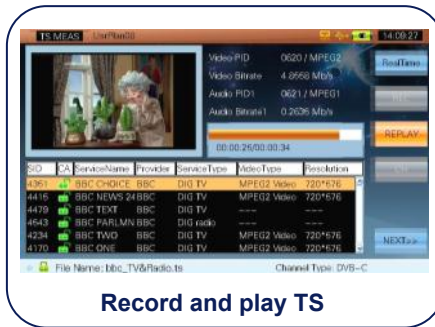
Spectrogram



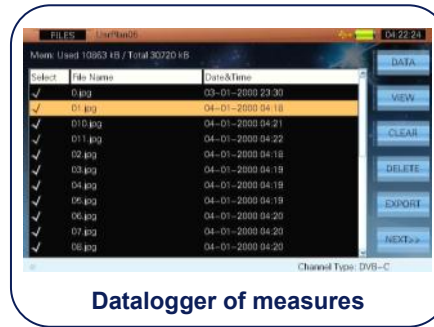
MER vs Carrier / Merogram



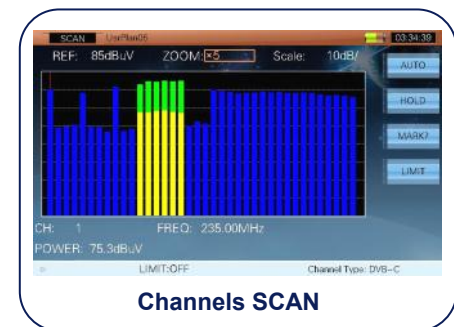
Echoes Analysis



Record and play TS



Datalogger of measures



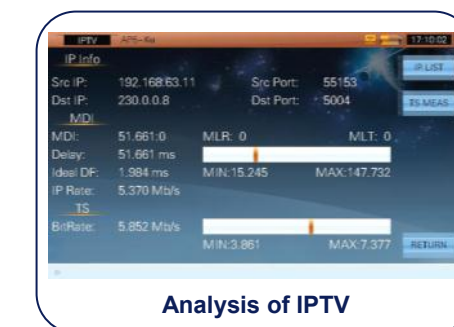
Channels SCAN



DiseqC and SatCR



Analysis TS norm TR101 290



Analysis of IPTV

Spectrum Analyzer		DTMB Measurement (Optional)	
Frequency Range	5 MHz ~ 1050 MHz (TV), 950 MHz ~ 2150 MHz (SAT)	Carriers	C=1, 3780
Span	1 MHz ~ 1050 MHz (TV), 10 MHz ~ 1200 MHz(SAT)	Power Level Range	25 dBµV ~ 110 dBµV
Frequency Step	10 kHz (TV), 1 MHz (SAT)	Power Level Resolution	0.1 dB
Resolution Bandwidth (-3 dB)	30 kHz, 100 kHz, 300 kHz, 1 MHz, 3 MHz (TV) 1 MHz, 3 MHz (SAT)	Power Level Accuracy	±1.5 dB (C/N >20dB)
Level Measurement Range	10 dBµV ~ 120 dBµV (TV) 30 dBµV ~ 120 dBµV (SAT)	MER Measurement	>28 dB
Accuracy of Measurements	<1.5 dB	MER Accuracy	±2.0 dB
Measurement Detector	Peak, Sample, AVG (TV), Spectrogram, Spectrogram + Spectrum analyzer	BER	√
Reference Level	30 dBµV ~ 120 dBµV	Constellation	√
Markers	2	Echoes	√
Analogue TV Measurement		ATSC Measurement	
Standars	B/G, I, D/K, L/L', M/N	Modulation Type	8 VSB
Colour Standars	PAL, SECAM, NTSC	Power Level Range	25 dBµV ~ 110 dBµV
Frequency Step	10 kHz	Power Level Resolution	0.1 dB
Hum Measurements	> 50dB	Power Level Accuracy	±1.5 dB(C/N >20 dB)
C/N	> 50dB	MER Measurement	≤35 dB
Level Measurement Range	30 dBµV ~ 120 dBµV	MER Accuracy	±2.0 dB
Accuracy of Measurement	< 1.5 dB	BER	√
Level resolution	0.1 dB	Constelation	√
Digital CATV (DVB-C ITU-T J.83 Annex A/B/C/D) Measurement		Video/Audio Decoder	
Modulation Type	16/32/64/128/256 QAM, 8VSB, 16VSB	Video	MPEG1/2/4, H.264
Symbol Rate	4.0 MS/s ~ 7.0 MS/s	Resolution	1080i, 720p y 576i
Power Level Range	30 dBµV ~ 110 dBµV	Audio	MPEG1/2/4, AAC
Power Level Resolution	0.1 dB	Module CAM	EN50221 (DVB-CI) PCMCIA
Power Level Accuracy	±1.5 dB(C/N > 20 dB)	TS-ASI Input and Output	√
MER Measurement	~40 dB	TS record/play	√
MER Accuracy	±2.0 dB	Transport Stream Analyzer (Optional)	
BER (Pre-BER, Post-BER)	1E-3 ~ 1E-9	DVB-ASI Interface	75 Ω BNC
Constelation	√	DVB-ASI Clock	270 MHz
DVB-T/H Measurement		DVB-ASI Max Data Rate	0 a 72 Mbps
Modulation Type	QPSK, 16 QAM, 64 QAM	DVB-ASI Output signal Level	1.0 Vp-p nominal
Power Level Range	25 dBµV ~ 110 dBµV	DVB-ASI Return Response	> 15dB
Power Level Range	25 dBµV ~ 110 dBµV	DVB-ASI Input Level	800 mV +/- 10%
Power Level Resolution	0.1 dB	Real Time Decoder	Display real TV pictures including program numbers, provider information, video & audio PIDs
Power Level Accuracy	±1.5 dB (C/N >20 dB)	TR101290 Monitor	Three levels real time monitor
MER Measurement	> 30 dB	Base Information	Count the PIDs percent according to the type of the stream. Videos, Audios, PSI/SI, Null Packages.
MER Accuracy	±2.0 dB	PID List	Display all the PIDs in current TS
CBER/VBER	√	PCR Monitor	Calculate PCR interval and PCR accuracy
Constellation	√	PSI/SI List	Display the PSI/SI infos by tree view, including PATM PAT,PMT,CAT (NIT,SDT,RST,TDT,EIT)
MER Versus Carriers/ Merogram	√	Program info	EPG
ISDB-T/Tb Measurement		PID Capture	Capture a specified PID by its type : Video, Audio, PSI (PAT,PMT,NIT,TDT,RST,SDT,EIT) etc.
Modulation Type	QPSK, 16 QAM, 64 QAM, 256QAM	Record/Play TS	Memory USB.
Modulation Bandwidth	6 MHz	Interface	
Power Level Range	25 dBµV ~ 110dBµV	RF Input	75 Ω
Power Level Resolution	0.1dB	HDMI Output	Standard 1.3
Power Level Accuracy	±2 dB(C/N >20 dB)	USB	USB 2.0
MER Measurement	> 30 dB	LAN	10/100 M
MER Accuracy	±2.0 dB	CAM (optional)	PCMCIA
CBER/LBER	√	TS-ASI Input/Output	2 x 75 Ω BNC
Constellation	√	DC Power Supply	12 V / 5 A
DVB-S/S2 Measurement		GPS Input	USB (GPS optional)
Modulation Type	QPSK, 8PSK	General	
Symbol Rate	2 - 45 MS/s (DVB-S)	Display	7 inches TFT LCD 800 × 480 pixels
	1 - 45 MS/s (QPSK DVB-S2)	AC/DC Adaptor	AC 100 - 240 V/50-60 Hz DC 12 V/5 A
	1 - 45 MS/s (8PSK DVB-S2)	Battery	Li-ion, 7.4 V/13 Ah
Power Level Range	40 - 110 dBµV	Charge Time	Around 5 Hours
Power Level Resolution	0.1 dB	Working Time	>4 Hours
Power Level Accuracy	±1.5 dB (C/N>20dB)	Remote Fidding	5/13/15/18/24 V, Max. 5 W
MER Measurement	> 25 dB	Control Signals	DiSeqC 1.2 y SaTCR
MER Accuracy	±2.0 dB	Dimension (W×H×L) / Weight	245 × 194 × 105mm / aprox. 2,8 Kg
BER	DVB-S (CBER/VBER), DVB-S2 (CBER/LBER)	Working Temperature	-10 ~ +50 °C
Constellation	√		