







□м≡т≡к

DEVELOPED BY AND FOR PROFESSIONALS

Ekselans by ITS introduces METEK product range, professional field meters. Designed and developed completely by our R&D team, are presented to the market as a complete, intuitive field meters that completely covers the current and future needs of telecommunication installers.

Access a professional field meter, with an unbeatable quality-price ratio and with the support and guarantee of EK.

- √ DVB-S/S2, DVB-T/T2, DVB-C Demodulation and analysis
- √ High-resolution 7-inch TFT-LCD screen
- √ High quality DSP Spectrum from 50-2200MHz with 50dB of onscreen dynamic range.
- √ Supports HEVC (H.265), MPEG4 (H.264) and MPEG2 decoding, SD & HD
- $\sqrt{}$ Single F Male connector input featuring a fully automatic attenuator with channel power of up to 120dBµV in 5dB steps
- √ Measures Channel power, Noise margin, MER, CBER, VBER, TS Errors and Constellation
- $\sqrt{}$ RF power supply from 5 to 24V, in 1V steps
- √ Supports Disegc 2.0, SATCR and DCSS
- √ Special spectrum modes (Max Hold, Spectrogram) for interference detection and LTE Measuring.
- √ Efficient and user friendly user interface
- √ Full TS recording to external USB drive
- √ Standard 6h battery life per charge
- √ Supports automatic adjustment of screen brightness
- $\sqrt{}$ Supports measurement + TV decoding, measurement + spectrum and measurement + constellation
- √ Standby mode for instant power on
- √ Multi-function wheel navigation
- √ Screen capture to external USB drive with a dedicated button.
- √ SAT support, transponder update separately via USB or FTP (WiFi)
- √ Firmware updates through USB or FTP (WiFi)
- √ EAC3 Dolby DD + codec
- √ Includes a second transport belt
- √ USB memory for capture storage

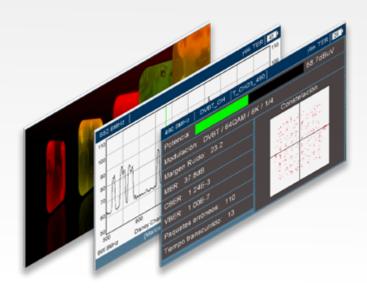


1 TRIPLE BAND

Specific button for fast switching between the different DVB-T / T2, S / S2, C bands. Possibility to hide the cable band (DVB-C).



02 TRIPLE SCREEN



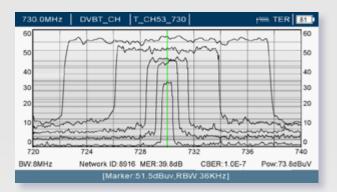
Fast switching between spectrum, measurements and image. By pressing the button of the desired mode, each functionality is quickly accessed. The dynamic navigation mode allows access to each channel as programmed.

MEASURES ON A SINGLE SCREEN

Quick access to all necessary measures with 7 "high-quality backlit TFT screen. Automatic adjustment of the intensity according to the ambient light.







O 5 POWER MEASUREMENT LTE AND LTE2

MAX Hold function to capture interfering signals from 4G and 5G mobile telephony. This function is present throughout the band to measure interference at any frequency.

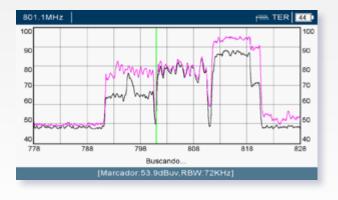
04

FAST AND PRECISE SPECTRUM

Self-adjusting resolution filters according to SPAN for a perfect balance between precision and measurement time. Spectrum of high resolution 1024 FFT.









<u>06</u>

HIGH PRECISION INPUT ATTENUATOR

Single RF input for all bands. High precision attenuator that can be ajusted manually or automatically up to 45dB.

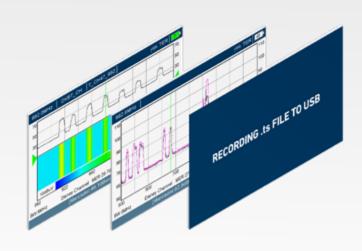




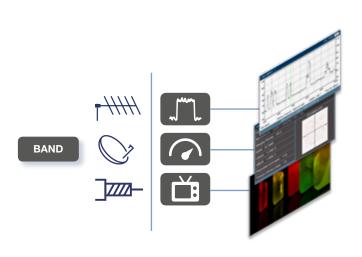
T HD VIDEO CODECS

4 H.265 64 HEVC Metek HD allows decoding of H.264 (MPEG4) and H.265 (HEVC) video. Audio MPEG-2 (L1 & L2), MPEG4 (AAC) codecs are also included.

O 8 ADDITIONAL PROFESSIONAL FUNCTIONS



Spectrogram, MAX hold, Satellite identification, WiFi, SatCR, DCSS, erroneous packets, Lte1 and Lte2 measurement, supplied voltage and current consumption measurement, screenshot, .ts recording, ...



19 QUICK NAVIGATION

Quick access to the functions of the meter and predefined groups in each band, for greater ease and speed of navigation. Exportable and editable groups. Creation of terrestrial, satellite or cable bands mixed groups.



AUTONOMY AND ENERGY SAVING

Lithium battery of high duration (~ 6h). Stand-by mode for faster starting speed and battery saving. Light intensity photodetector for automatic adjustment of the screen illumination.

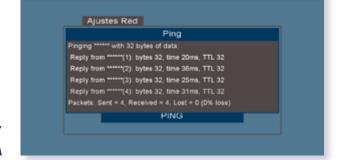




ERGONOMICS AND PROTECTION

Lateral rubber cover for protection against impacts. Ergonomic function and belt support.

12 WIFI NETWORK



It allows to detect and connect to WiFi 2.4GHz networks, see the power of each network and make tests of the link to the network (PING).



- 1. POWER ADAPTER 15V 2,5A
- 2. CABLE CHARGER FOR CAR
- 3. ADAPTER F FEMALE IEC FEMALE
- 4. ADAPTER F FEMALE F FEMALE
- 5. TRANSPORTATION BAG



TECHINCAL INFORMATION				
Monitor Display	7-inch TFT			
Dots Pixels	1024*600			
The lithium battery	7.4 V 7800 mAh 57.7 Wh			
RF Input	F Male connector,75 Ω			
Video/Audio output	HDMI Output			
External Units Power supply				
Satellite band	0 V, 5 ~ 24 V (Steps1 V)			
22KHZ singal	Selectable in Satellite Band			
Diseqc generator	Diseqc 1.0/1.1/2.0			
Terrestrial Band	0 V, 5 ~ 24 V (Steps1 V)			
Battery Operation Time	6 hours			
Power off current				
	<2 mA			
VEDIO DECODING	MPEG1, MPEG-2 MP@ML, H.264, VC1, DV, MPEG-4, H.265 (1080p@60fps)			
AUDIO DECODING OUTPUT MODE	MPEG-2 layer I and II (Musiccam), MPEG4 AAC Mono, Dual Channel, Stereo, Joint Stereo			
METER NAVIGATION MC	DDE			
Frequency Range	950~2150 MHz			
Support Measurement parameter	Channel power, Noise margin, MER, CBER, VBER, TS Errors, Constellation			
Symbol rate	1 ~ 55 MS/s			
Power resolution	0.1 dB			
Power Accuracy	±1.8 dB			
MER range	>25 dB			
Power range	20~120 dBμV			
Demodulation	DVB-S/S2 QPSK, 8PSK, 16APSK, 32APSK, ACM / VCM			
Terrestrial				
Frequency Range Support Measurement parameter	51 ~ 1000 MHz Channel power, Noise margin, MER, CBER, VBER, TS Errors, Constellation			
Symbol rate	6 MHz, 7 MHz, 8 MHz			
Power resolution	0.1dB			
Power Accuracy	±1.8 dB			
MER range	>35 dB			
Power range	30~120 dBμV			
demodulation	DVB-T/T2 COFDM			
Cable				



Support Measurement parameter	Power, CBER, VBER, MER, Const	Power, CBER, VBER, MER, Constellation		
Symbol rate	6 MS/s	6 MS/s		
Power resolution	0.1 dB	0.1 dB		
Power Accuracy	±1.8 dB	±1.8 dB		
MER range	>35 dB	>35 dB		
Power range	30~120 dBµV			
Demodulation	DVB-C QAM,J83 Annex C QAM	DVB-C QAM,J83 Annex C QAM		
SPECTRUM NAVIGATION	N MODE (DSP)			
Frequency Range	Terrestrial&Cable: 50 ~ 1000 MHz			
	Satellite: 900 ~ 2200 MHz			
Reference Level	Terrestrial&Cable: 60 ~ 110 dBμV in 5 dB steps			
	Satellite: 60 ~ 110 dBµV in 5dB steps			
Accuracy	±1.8 dB			
Span	Terrestrial&Cable: 10, 20, 50, 100, 200, 500, 950 MHz			
	Satellite: 10, 20, 50, 100, 200, 500, 1200 MHz			
	Terrestrial&Cable: 36, 72, 145, 291, 583, 1166 KHz			
RBW	Satellite: 100 KHz, 200 KHz, 500 KHz, 1 MHz, 2 MHz, 5 MHz			
FFT/Sample Size	1024 Points			
INTERFACE				
	HDMI 1.4A			
	USB 2.0 (MAX 1 A)			
Left side interface	RS232			
	DC IN (12 ~ 15 V)			
Top interface	TUNER	3 tuners in 1(DVB-S2,DVB-T2,DVB-C)		
	4 LED lights	On /Off, Charge, Lock, RF Power		
Buttons on panel	24 Buttons	(TV, Spectrum, Meter, Options, Menu, Band, Up, Down, Left, Right, Enter, Esc, 0-9 Power)		
Housing (cabinet)	Dimensions	269 mm (L) x 187 mm (W) x 62.5 mm (H)		
Accessories	Adapter	15 V-2,5 A		
	Car charger	Yes		
	Carrying bag	Included (space for tools and pocket)		
	F female to female connector	Yes		



TECHINCAL INFORMATION				
Monitor Display	7-inch TFT			
Dots Pixels	1024*600			
The lithium battery	7.4 V 7800 mAh 57.7 Wh			
RF Input	F Male connector,75 Ω			
Video/Audio output	HDMI Output			
External Units Power supply				
Satellite band	0 V, 5 ~ 24 V (Steps1 V)			
22KHZ singal	Selectable in Satellite Band			
Diseqc generator	Diseqc 1.0/1.1/2.0			
Terrestrial Band	0 V, 5 ~ 24 V (Steps1 V)			
Battery Operation Time	6 hours			
Power off current	<2 mA			
VEDIO DECODING	MPEG1, MPEG-2 MP@ML, H.264, VC1, DV, MPEG-4, H.265 (1080p@60fps)			
AUDIO DECODING OUTPUT MODE	MPEG-2 layer I and II (Musiccam), MPEG4 AAC, EAC3 Dolby DD + codec Mono, Dual Channel, Stereo, Joint Stereo			
Satellite	ODE			
Frequency Range	950~2150 MHz			
Support Measurement	Channel power, Noise margin, MER, CBER, VBER, TS Errors, Constellation			
parameter	Channel power, Noise margin, MER, CBER, VBER, TS Errors, Constellation			
Symbol rate	Channel power, Noise margin, MER, CBER, VBER, TS Errors, Constellation 1 ~ 55 MS/s			
·				
Symbol rate	1 ~ 55 MS/s			
Symbol rate Power resolution	1 ~ 55 MS/s 0.1 dB			
Symbol rate Power resolution Power Accuracy MER range Power range	1 ~ 55 MS/s 0.1 dB ±1.8 dB >25 dB 20~120 dBμV			
Symbol rate Power resolution Power Accuracy MER range Power range Demodulation	1 ~ 55 MS/s 0.1 dB ±1.8 dB >25 dB			
Symbol rate Power resolution Power Accuracy MER range Power range Demodulation Terrestrial	1 ~ 55 MS/s 0.1 dB ±1.8 dB >25 dB 20~120 dBμV DVB-S/S2 QPSK, 8PSK, 16APSK, 32APSK, ACM / VCM			
Symbol rate Power resolution Power Accuracy MER range Power range Demodulation Terrestrial Frequency Range Support Measurement	1 ~ 55 MS/s 0.1 dB ±1.8 dB >25 dB 20~120 dBμV			
Symbol rate Power resolution Power Accuracy MER range Power range Demodulation Terrestrial Frequency Range	1 ~ 55 MS/s 0.1 dB ±1.8 dB >25 dB 20~120 dBμV DVB-S/S2 QPSK, 8PSK, 16APSK, 32APSK, ACM / VCM			
Symbol rate Power resolution Power Accuracy MER range Power range Demodulation Terrestrial Frequency Range Support Measurement parameter	1 ~ 55 MS/s 0.1 dB ±1.8 dB >25 dB 20~120 dBμV DVB-S/S2 QPSK, 8PSK, 16APSK, 32APSK, ACM / VCM 51 ~ 1000 MHz Channel power, Noise margin, MER, CBER, VBER, TS Errors, Constellation			
Symbol rate Power resolution Power Accuracy MER range Power range Demodulation Terrestrial Frequency Range Support Measurement parameter Symbol rate	1 ~ 55 MS/s 0.1 dB ±1.8 dB >25 dB 20~120 dBμV DVB-S/S2 QPSK, 8PSK, 16APSK, 32APSK, ACM / VCM 51 ~ 1000 MHz Channel power, Noise margin, MER, CBER, VBER, TS Errors, Constellation 6 MHz, 7 MHz, 8 MHz			
Symbol rate Power resolution Power Accuracy MER range Power range Demodulation Terrestrial Frequency Range Support Measurement parameter Symbol rate Power resolution	1 ~ 55 MS/s 0.1 dB ±1.8 dB >25 dB 20~120 dBμV DVB-S/S2 QPSK, 8PSK, 16APSK, 32APSK, ACM / VCM 51 ~ 1000 MHz Channel power, Noise margin, MER, CBER, VBER, TS Errors, Constellation 6 MHz, 7 MHz, 8 MHz 0.1dB			
Symbol rate Power resolution Power Accuracy MER range Power range Demodulation Terrestrial Frequency Range Support Measurement parameter Symbol rate Power resolution Power Accuracy	1 ~ 55 MS/s 0.1 dB ±1.8 dB >25 dB 20~120 dBμV DVB-S/S2 QPSK, 8PSK, 16APSK, 32APSK, ACM / VCM 51 ~ 1000 MHz Channel power, Noise margin, MER, CBER, VBER, TS Errors, Constellation 6 MHz, 7 MHz, 8 MHz 0.1dB ±1.8 dB			
Symbol rate Power resolution Power Accuracy MER range Power range Demodulation Terrestrial Frequency Range Support Measurement parameter Symbol rate Power resolution Power Accuracy MER range	1 ~ 55 MS/s 0.1 dB ±1.8 dB >25 dB 20~120 dBµV DVB-S/S2 QPSK, 8PSK, 16APSK, 32APSK, ACM / VCM 51 ~ 1000 MHz Channel power, Noise margin, MER, CBER, VBER, TS Errors, Constellation 6 MHz, 7 MHz, 8 MHz 0.1dB ±1.8 dB >35 dB			
Symbol rate Power resolution Power Accuracy MER range Power range Demodulation Terrestrial Frequency Range Support Measurement parameter Symbol rate Power resolution Power Accuracy MER range Power range	1 ~ 55 MS/s 0.1 dB ±1.8 dB >25 dB 20~120 dBμV DVB-S/S2 QPSK, 8PSK, 16APSK, 32APSK, ACM / VCM 51 ~ 1000 MHz Channel power, Noise margin, MER, CBER, VBER, TS Errors, Constellation 6 MHz, 7 MHz, 8 MHz 0.1dB ±1.8 dB >35 dB 30~120 dBμV			



Power resolution	0.1 dB				
Power Accuracy	±1.8 dB				
MER range	>35 dB				
Power range	30~120 dBμV				
Demodulation	DVB-C QAM,J83 Annex C QAM				
SPECTRUM NAVIGATION MODE (DSP)					
Frequency Range	Terrestrial&Cable: 50 ~ 1000 MHz				
	Satellite: 900 ~ 2200 MHz				
Reference Level	Terrestrial&Cable: 60 ~ 110 dBμV in 5 dB steps				
	Satellite: 60 ~ 110 dBµV in 5dB steps				
Accuracy	±1.8 dB				
Sana	Terrestrial&Cable: 10, 20, 50, 100, 200, 500, 950 MHz				
Span	Satellite: 10, 20, 50, 100, 200, 500, 1200 MHz				
DDW	Terrestrial&Cable: 36, 72, 145, 291, 583, 1166 KHz				
RBW	Satellite: 100 KHz, 200 KHz, 500 KHz, 1 MHz, 2 MHz, 5 MHz				
FFT/Sample Size	1024 Points				
INTERFACE					
	HDMI 1.4A				
	USB 2.0 (MAX 1 A)				
Left side interface	RS232				
	DC IN (12 ~ 15 V)				
Top interface	TUNER	3 tuners in 1(DVB-S2,DVB-T2,DVB-C)			
	4 LED lights	On /Off, Charge, Lock, RF Power			
Buttons on panel	24 Buttons	(TV, Spectrum, Meter, Options, Menu, Band, Up, Down, Left, Right, Enter, Esc, 0-9 Power)			
Housing (cabinet)	Dimensions	269 mm (L) x 187 mm (W) x 62.5 mm (H)			
Accessories	Adapter	15 V-2,5 A			
	Car charger	Yes			
	Carrying bag	Included (space for tools and pocket)			
	F female to female connector	Yes			



EKSELANS by ITS ITS Partner 0.B.S. S.L

Av. de Cerdanyola 79-81 Local C 08172 Sant Cugat del Vallès Barcelona (España) Tel: +34 93 583 95 43 info@ek.plus www.ek.plus