

HD RANGER *Eco*

Field strength meter for the High Definition Television



DVB-T2/C2/S2

The **HD RANGER Eco** is a universal field strength meter that covers a comprehensive mix of broadcast standards around the globe. The latest developments in broadcast technology such as DVB-T/C/S/S2 with MPEG-2 as well as MPEG-4 video are managed effortlessly within the product.

One of the most noticeable and stunning features on the new **HD RANGER Eco** product is the ultra fast spectrum analyser. As soon as you use the analyser you will experience this outstanding feature as one of the major changes we have adopted in the new product allowing you to sweep faster and more accurately.

The introduction of the latest technology within the product allows you to display multiple screens either overlapped together or in a split screen format.

6th generation of TV & Satellite analysers

- ✓ Triple split display: 3 functions in a single screen.
- ✓ Fast and accurate spectrum analyser.
- ✓ StealthID: Identifying the tuning parameters.
- ✓ Advanced satellite functions.
- ✓ Powerful datalogger and installation menu.
- ✓ USB PC Connection.
- ✓ Constellation diagram.
- ✓ Dynamic echoes analysis.

HD RANGER *Eco*

Field strength meter for the
High Definition Television

SPECIFICATIONS	HD RANGER <i>Eco</i>
GENERAL Inputs and outputs RF input USB Interface Video/Audio input Monitor Display Ext. Unit Power (through RF input connector) Terrestrial Supply Satellite Supply 22 kHz signal DiSEqC Generator Dimensions & Weight Battery Operation Time Included Accessories	F-type male, 75 Ω Mini-USB. Mass storage host, Serial port emulation, USB CDC "Communications Device Class" Jack multipole connector 7" TFT, 16:9 External, 5, 12 and 24 V External, 13 V, 15 V, 18 V Selectable in Satellite band According to DiSEqC 1.2 standard ⁽¹⁾ 290 (W.) x 185 (H.) x 65 (D.) mm. 1.6 kg. > 2 hours in continuous mode Connection USB Cable On-the-go (A) Male – Mini USB (B) Male, USB Cable (A) Female – Mini USB (A) Male, Car lighter charger, External DC charger, F/H adapters to BNC/H / DIN/H / F/H, Mains cord, Transport belt, Carrying bag, Quick Reference Guide
MEASUREMENT MODE Tuning range DVB-T COFDM Measures DVB-T2 Base and Lite COFDM Measures DVB-C QAM, J83 Annex C QAM Measures DVB-C2 COFDM Measures Analogue TV PAL, SECAM and NTSC Standard supported FM radio Measures DVB-S QPSK Measures DVB-S2 QPSK, 8PSK, 16APSK, 32APSK Measures DSS QPSK Measures	Displayed data: Numeric and Level bar From 5 to 1000 MHz (Terrestrial), 950 to 2150 MHz (Satellite) From 35 dB μ V to 115 dB μ V Power, CBER, VBER, MER, C/N and Link margin From 35 dB μ V to 115 dB μ V Power, CBER, C/N, LBER, MER, BCH ESR, LDP Iterations, Link Margin and Wrong packets From 45 dB μ V to 115 dB μ V Power, BER, MER, C/N and Link margin From 45 dB μ V to 115 dB μ V Power, CBER, MER, C/N, LBER, BCH ESR, LDP Iterations, Link Margin and Wrong packets M, N, B, G, I, D, K and L Level From 35 dB μ V to 115 dB μ V Power, CBER, MER, C/N and Link Margin From 35 dB μ V to 115 dB μ V Power, CBER, LBER, MER, C/N, BCH ESR, Wrong Packets and Link Margin From 35 dB μ V to 115 dB μ V Power, CBER, VBER, MER, C/N, Link Margin and Noise Margin
SPECTRUM ANALYSER MODE Tuning range Reference Level Span Measurement range Measurement bandwidth	From 5 to 1000 MHz (Terrestrial), 950 to 2150 MHz (Satellite) From 70 dB μ V to 120 dB μ V (Adjustable in steps of 5 dB) Full span / 500 MHz / 200 MHz / 100 MHz / 50 MHz / 20 MHz / 10 MHz From 20 to 120 dB μ V 100 kHz
VIDEO Codecs Maximum Image Size	MPEG-1, MPEG-2, MPEG-4 AVC H.264 1920x1080x60i; 1280x720x60p/50p
AUDIO CODECS	MPEG-1, MPEG-2, HE-AAC, Dolby Digital Plus
TOOLS	Constellation diagram, Dynamic echoes, Attenuation Test ⁽²⁾ , Datalogger ⁽³⁾ , PLS indicator, ISI filtering, Screen capture Key, Signal monitoring, Field strength, Task planner, H.265 detection

(1) DiSEqC™ is a trademark of EUTELSAT.

(2) Attenuation Test function designed to be used with **RP-110** multiple pilot generator.

(3) Using NetUpdate software application under Windows PC platform.



5 GOLDEN RULES to choose your FIELD STRENGTH METER



Professional



Power



Battery life



Ergonomics



Functions



SCAN for more info



**HD RANGER
Eco**



**HD RANGER
UltraLite**



**RANGER
Neo Lite**

Digital inputs

DVB-T/C/S
DVB-T2/C2/S2
DOLBY DIGITAL PLUS

DVB-T/C/S
DVB-T2/C2/S2
DOLBY DIGITAL PLUS

DVB-T/C/S
DVB-T2/C2/S2
DOLBY DIGITAL PLUS

H.265 HEVC

H.264 MPEG-4 MPEG-2

Touch screen

LCD size

Wideband LNB

2.4 GHz WiFi analyser

Datalogger

Ultra fast spectrum

Triple split display

Constellation diagram

Dynamic echoes analysis

HDMI output

Video input

✓

✓

✓

✓

✓

✓

✓

✓

✓

7"

7"

7"

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓



OPTIONAL



INCLUDED

Applications



Aerials, residential,
MDUs, FSM,
LTE interference



DTH, VSAT, TI,
TVRO, earth station



Outside broadcasting
(OB Vans), SNG,
Flyaway



Headend and
network installation.
Subscriber outlet test.



Home network,
commercial,
point to point

A new breed of analyzers for a new world



RANGER Neo 4 RANGER Neo 3 RANGER Neo 2 RANGER Neo + RANGER Neo Lite HD RANGER UltraLite HD RANGER Eco

- ✓ Included
● Optional

- ALL VERSIONS
■ DVB MODELS ONLY
■ ISDB-T MODELS ONLY
■ ATSC MODELS ONLY

4K decoder	✓						
HEVC H.265 decod. + 4K Frame Grabber	✓	✓	✓	✓	✓		
MPEG-2 and MPEG-4 H.264 decoder	✓	✓	✓	✓	✓	✓	✓
Touch screen	✓	✓	✓	✓	✓		
Wide band LNB Compatibility (wbLNB)	✓	✓	✓	✓	✓		
2.4 GHz Wi-Fi analyzer	✓	✓	✓	✓	✓		
1.8 GHz LTE	✓	✓	✓	✓	✓		
OTT	✓	✓	✓	✓	✓		
Service recording	✓	✓	✓	✓	✓	✓	
HDMI output	✓	✓	✓	✓	✓		
Video/Audio input	✓	✓	✓	✓	✓	✓	✓
USB interface	2x Type A	2x Type A	2x Type A	2x Type A	2x Type A	1x Mini USB	1x Mini USB
Battery time	> 4 hours	> 4 hours	> 4 hours	> 4 hours	> 2 hours	> 2 hours	> 2 hours
Resolution filter 100 kHz	✓	✓	✓	✓	✓	✓	✓
Resolution filters 200 kHz, 1 MHz	✓	✓	✓	✓		✓	
Resolution filters 2, 10, 20, 30, 40 kHz	✓	✓	✓				
Echoes analysis	✓	✓	✓	✓	✓	✓	✓
Constellation diagram	✓	✓	✓	✓	✓	✓	✓
Web server and Video/Audio Streaming	✓	✓	✓	✓			
Spectrogram and Merogram	✓	✓	✓	✓			
MER by carrier	✓	✓	✓	✓			
SCAN + TILT	✓	✓	✓	✓			
IPTV analyzer	✓	✓	✓				
TS-ASI input and output	✓	✓	✓				
TS analysis and recording	✓	✓	✓				
Common Interface (encrypted channels)	✓	✓	✓				
Shoulder attenuation measurement	✓	✓	✓				
T2-MI	✓	✓					
Network delay Margin	✓	✓					
GPS for drive test	✓	✓	●	●			
DAB/DAB+ digital radio	✓	✓	●	●			
5 GHz WiFi + 2.6 GHz LTE + 6 GHz RF in	●	●	●	●			
Optical measurements							
and optical to RF converter	●	●	●	●			
ATSC standard			✓	✓	✓		
ISDB-T standard			✓	✓	✓		
DVB-T/T2 standard	✓	✓	✓	✓	✓	✓	✓
DVB-S/S2, DSS and ACM/VCM standards	✓	✓	✓	✓	✓	✓	✓
DVB-C standard	✓	✓	✓	✓	✓	✓	✓
DVB-C2 standard	✓	✓	✓	✓	✓	✓	✓
QAM annex B standard			✓	✓	✓		
PSIP analysis			✓				
Closed Caption			✓				