

## HD RANGER UltraLite



DVB-T2/C2/S2

DOLBY DIGITAL PLUS

Ultra fast spectrum analyser

lte



The **HD RANGER UltraLite** 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/T2, DVB-C/C2, DVB-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 UltraLite** product is the ultra fast spectrum analyser. As soon as you use the analyser you will experience this outstanding feature of the **HD RANGER** product family.

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



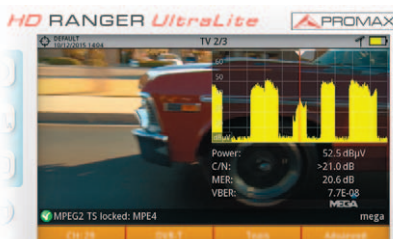
Less weight and volume:  
1.4 kg



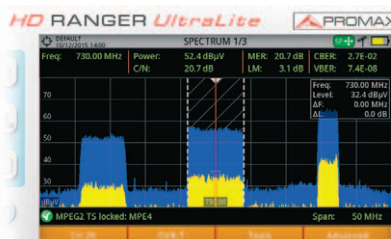
Firmware updating  
via Internet



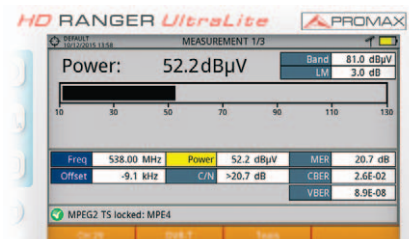
**HD RANGER**  
performance  
and speed



Triple split display:  
3 functions in a single screen



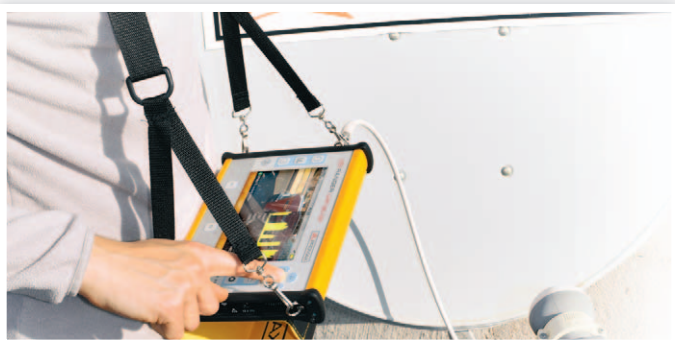
Fast and accurate  
spectrum analyser



All measurements  
in a single screen

## HD RANGER *UltraLite*

Field strength meter for the High Definition Television



### A true hands-free instrument

The analyser is easier to use thanks to its exclusive design shoulder strap.



### Reports and updates

Download measurement reports to your PC and install new functions in your analyser at no cost.



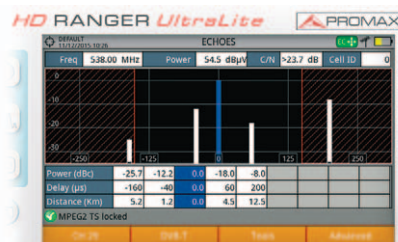
### Fast, powerful and accurate

A new form factor with the recognised quality of all PROMAX field strength meters.

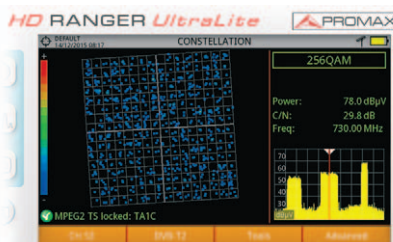


### Even easier to carry away

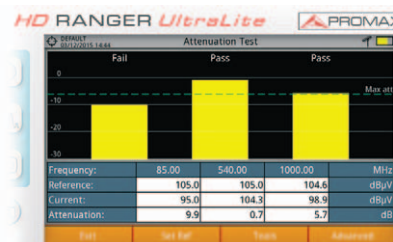
It is handy and lightweight. Small and portable. A more transportable field strength meter.



Dynamic echoes analyser



Constellation diagram



Attenuation test



## HD RANGER *UltraLite*

Field strength meter for the High Definition Television



**HD RANGER**  
*Lite*



**HD RANGER**  
*UltraLite*



**HD RANGER+**



**HD RANGER**  
**2**

✓ Included

○ Optional

Digital standards

Weight  
Dynamic echoes analysis  
Firmware updates  
Upgradable with new functions  
Audio/Video input  
Audio/Video output  
Merogram and Spectrogram  
Signal monitoring  
MER by carrier measurement  
Internal LTE filters  
Touch screen  
HDMI output  
IPTV input  
ASI-TS input and output  
Encrypted channels (CAM module)  
Transport Stream analyser  
Optical fibre measurements  
GPS

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	DVB-T/C/S DVB-T2/C2/S2 DOLBY DIGITAL PLUS
1.6 kg	1.4 kg	1.9 kg	2.2 kg
✓	✓	✓	✓
✓	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
		✓	✓
		✓	✓
		✓	✓
		✓	✓
			✓
			✓
			✓
			✓
			✓
		○	○
		○	○

HD RANGER

## HD RANGER *UltraLite*

Field strength meter for the  
High Definition Television

SPECIFICATIONS	HD RANGER <i>UltraLite</i>
<b>GENERAL</b> Inputs and outputs RF input USB interface Video/Audio input Monitor Display External Unit Power supply Terrestrial Supply Satellite Supply 22 kHz signal DiSEqC Generator Dimensions & Weight Battery Operation Time Included Accessories	F-type male, 75 $\Omega$ Mini-USB. Mass storage host, Serial port emulation, USB CDC "Communications Device Class" Multipole jack connector 7" TFT, 16:9 Through RF input connector External, 5, 12 and 24 V External, 13 V, 15 V, 18 V Selectable in Satellite band According to DiSEqC 1.2 standard <sup>(1)</sup> 245 (W.) x 177 (H.) x 39 (D.) mm. 1.4 kg. > 2 hours in continuous mode RCA to multipole jack adaptor cable for Video and Left/Right audio, 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
<b>MEASUREMENT MODE</b> 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, NTSC Standard supported Radio FM 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), from 950 to 2150 MHz (Satellite) From 35 dB $\mu$ V to 115 dB $\mu$ V Power, CBER, VBER, MER, C/N and Link margin From 35 dB $\mu$ V to 115 dB $\mu$ V Power, CBER, C/N, LBER, MER, BCH ESR, LDP Iterations, Link Margin and Wrong packets From 45 dB $\mu$ V to 115 dB $\mu$ V Power, BER, MER, C/N and Link margin De 45 dB $\mu$ V to 115 dB $\mu$ 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 $\mu$ V to 115 dB $\mu$ V Power, CBER, MER, C/N and Link Margin From 35 dB $\mu$ V to 115 dB $\mu$ V Power, CBER, LBER, MER, C/N, BCH ESR, Wrong packets and Link Margin From 35 dB $\mu$ V to 115 dB $\mu$ V Power, CBER, VBER, MER, C/N, Link Margin and Noise Margin
<b>SPECTRUM ANALYSER MODE</b> Tuning range Reference Level Span Measurement range Measurement bandwidth	From 5 to 1000 MHz (Terrestrial), from 950 to 2150 MHz (Satellite) From 70 dB $\mu$ V to 120 dB $\mu$ 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 $\mu$ V 100 kHz
<b>VIDEO</b> Codecs Maximum image size	MPEG-1, MPEG-2, MPEG-4 AVC H.264 1920x1080x60i; 1280x720x60p/50p
<b>AUDIO CODECS</b>	MPEG-1, MPEG-2, HE-AAC, Dolby Digital Plus
<b>TOOLS</b>	Constellation diagram, Dynamic echoes, Attenuation Test <sup>(2)</sup> , Datalogger <sup>(3)</sup> , PLS indicator, ISI filtering, Screen capture key, Field strength, Task planner, H.265 detection

DESIGN AND SPECIFICATIONS ARE SUBJECT TO CHANGES WITHOUT PRIOR NOTICE 12-15

## 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			✓				