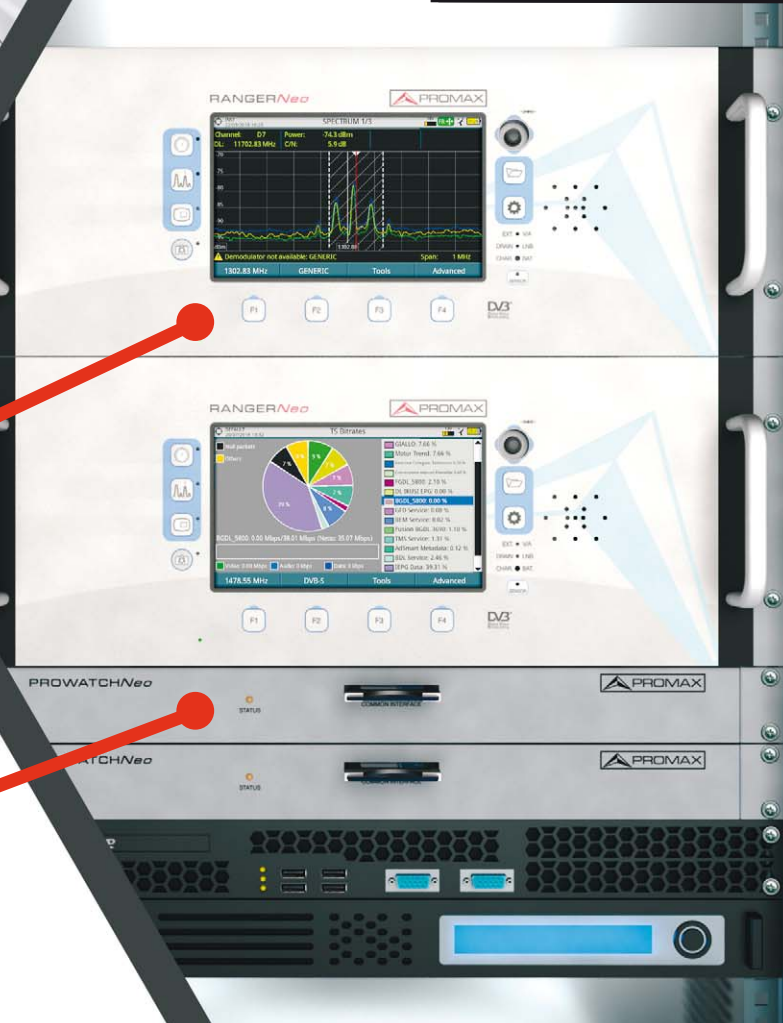




# RANGER NEO RACK

# PROWATCH NEO

**POINTING THE DISH HAS NEVER BEEN EASIER**  
**RACK MOUNTED SPECTRUM ANALYZERS FOR OB VANS**



## RANGER NEO RACK

- Professional spectrum analyzer
- Optimum antenna aiming
- RF measurements
- MPEG-2, MPEG-4 and H.265 image decoding
- TS analysis and recording: Tables and bitrates
- Continuous monitoring
- Remote control
- Several versions available

## PROWATCH NEO

Centralized integrated system for telecommunications signals monitoring with SNMP databases connection.

## FAST AND ACCURATE ANTENNA POINTING

Designed for its installation and integration in rack systems of OB vans, **RANGER Neo rack** and **PROWATCH Neo** systems are the solution needed by any professional involved in the reception and retransmission of satellite signals.

Including 24/7 permanent monitoring of satellite feeds, continuous evaluation of the transmission quality, system performance tracking... PROMAX systems feature remote control, webserver, SNMP compatibility, video streaming and alarms management.



Proven technology. PROMAX expertise.

### FOR AIMING AND ANALYSIS



**RANGER Neo**  
Signal analysis.  
Antenna pointing.  
In field or remote control.

### FOR 24/7 MONITORING



**PROWATCH Neo**  
24/7 monitoring.  
Signal tracking.  
Internet remote control.



SNG, VSAT and mobile satellite antennas (flyaway) alignment



Mobile satellite antennas pointing and signal monitoring



Teleport 24/7 monitoring



Government and military SATCOM



Oil rig & maritime satellite communications



Beacon, TT&C (Telemetry, Tracking, and Command) signal location and monitoring



Satellite, TV and CATV entertainment systems



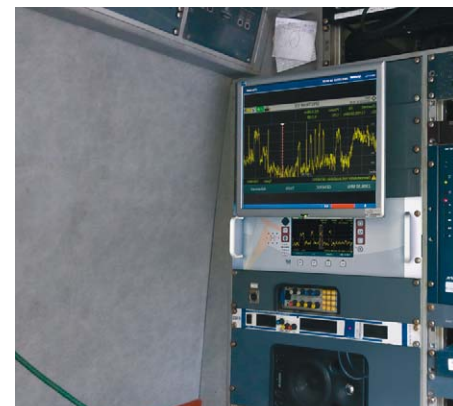
VSAT system on-site and remote commissioning



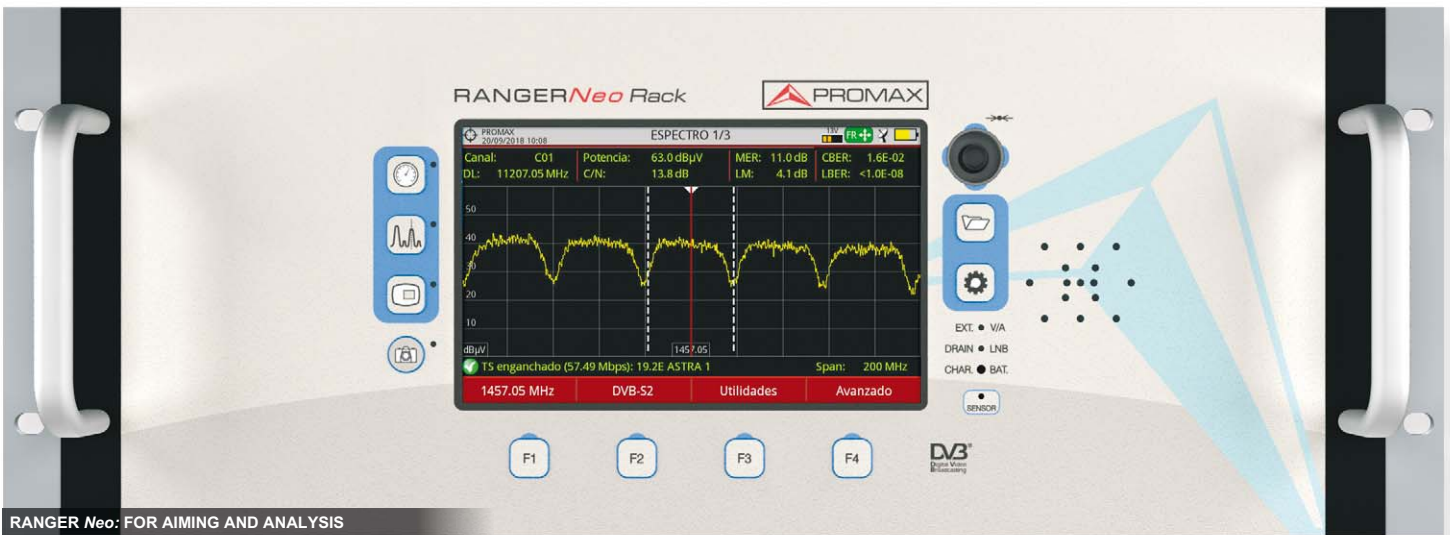
## PERFECT FOR ANTENNA ADJUSTMENTS IN C-BAND AND KU/KA BAND

The spectrum analyzer covers the Satellite FI band (L band) to analyze signals coming from satellites in Ku/Ka and C bands.

But **RANGER Neo rack** and **PROWATCH Neo** are more than just spectrum analyzers! They are truly multifunctional tools with features such as resolution bandwidths between 10 kHz and 1 MHz, high frequency accuracy, screen captures, datalogger and 24/7 signal monitoring. They are also SNMP compatible.



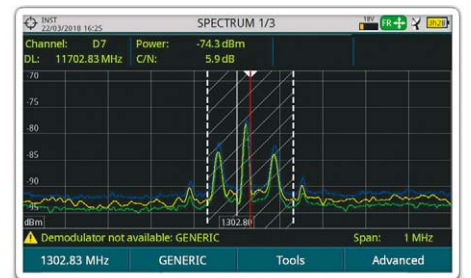




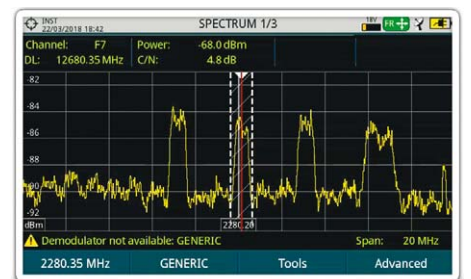
RANGER Neo: FOR AIMING AND ANALYSIS



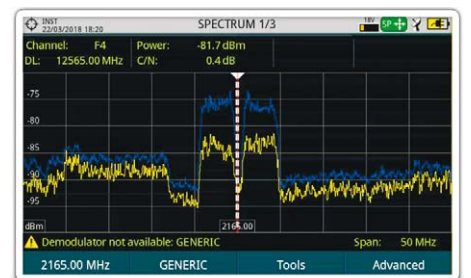
PROWATCH Neo: FOR 24/7 MONITORING



Satellite beacon with Max and Min hold



Satellite modems



2.1 GHz Terrestrial Interference from mobile phone base station

**SPECIFICATIONS**

**Frequency margin**  
From 5 to 2500 MHz  
(expandable up to 6 GHz)

**Input margin**  
From -90 to 20 dBm  
(20 to 130 dBμV approx.)

**Resolution filters**  
10, 20, 30, 40,  
100, 200 kHz, 1 MHz

**Span:** Full, 1500, 1265,  
850, 500, 250, 200, 100,  
50, 20, 10, 2, 1 MHz

**Fast sweep time**  
70 ms depending  
on span/RBw

**Amplitude sensitivity**  
1, 2, 5, 10 dB/DIV

**Advanced features**  
Markers, Max/Min hold,  
Persistence, RMS/PEAK,  
Trace averaging,  
SAT IRG descriptor

**LNA/LNB power**  
5/13/15/18 VDC, 22 kHz,  
DiSEqC, SATCR, dCSS

**Remote control**  
Ethernet port,  
webserver, SNMP

**Display**  
7" colour TFT

**Operation**  
Touch screen and  
conventional  
keypad

SPECIFICATIONS	RANGER Neo Rack Lite	RANGER Neo Rack + PROWATCH Neo +	RANGER Neo Rack 2 PROWATCH Neo 2	RANGER Neo Rack 3	RANGER Neo Rack 4
<b>SPECTRUM ANALYZER</b> Frequency margin Measurement range Span Resolution bandwidths	From 5 to 1000 MHz (Terrestrial), From 250 to 2500 MHz (Satellite) From 10 to 130 dBuV Full / 500 / 200 / 100 / 50 / 20 / 10 MHz				
	100 kHz	100, 200 kHz 1 MHz	2 kHz (terrestrial) 10, 20, 30, 40, 100, 200 kHz 1 MHz		
<b>DIGITAL BROADCAST STANDARDS</b>  (ATSC VERSION AVAILABLE)	DVB-T/T2, DVB-T2 lite DVB-C/C2 DVB-S/S2 DVB-S2 Multistream ISDB-T/Tb DSS, ACM / VCM / CCM		... Also includes: MPEG-TS	... Also includes: DVB-T2-MI	
<b>AUDIO CODECS</b>	MPEG-1, MPEG-2, AAC, HE-AAC, Dolby Digital, Dolby Digital Plus				
<b>VIDEO CODECS</b>	MPEG-2, MPEG-4 / H.264, HEVC / H.265				
<b>INPUTS AND OUTPUTS</b>	- Universal RF inputs 75 Ω / 50 Ω - HDMI™ output - IP interface for remote control - Analogue Video/Audio input - 2xUSB (Type-A) for data transferring		... Also includes: - ASI-TS input and output (BNC Female, 75 Ω) - IPTV multicast input (UDP / RTP, RJ45) - Slot Common Interface	... Also includes: - 1 pps input	
<b>COMMON FUNCTIONS</b>	- Constellation diagram - LTE ingress test - Dynamic echoes analysis - PLS (Physical Layer Scrambling) - 4K detection	- StealthID (instant identification of tuning parameters) - Ultra fast spectrum analyzer (70 ms sweep) - 4K Frame grabber	- MAX and MIN hold - FM RDS radio measurement and decoding - Wideband LNB - Screenshots and Datalogger for meas. reports	- Beacon-Flyaways for SNG and VSAT - WiFi 2.4 GHz - LTE 1.8 GHz - OTT - Service Recording	- Field strength measurem. - Task planner - HbbTV information - DAB+ channel plan included
<b>ADDITIONAL FUNCTIONS</b>		- Merogram - Spectrogram - Signal monitoring - Remote control ( <i>webControl</i> ) - MER by carrier - Video/Audio Streaming - SCAN + TILT - Shoulder attenuation	- TS recording - TS analysis - IPTV multicast measurement and decoding	- Network delay (DVB) - DVB-T2-MI analysis	- 4K decoder
<b>LNB SUPPLY</b>	5 V, 12 V, 24 V (terrestrial band); 5 V, 13 V, 15 V, 18 V + 22 kHz (satellite band)				
<b>DIMENSIONS</b> RANGER Neo Rack (4U height) PROWATCH Neo (1U height)	482 (W) x 177.6 (H) x 238.7 (D) mm 482 (W) x 44.5 (H) x 381 (D) mm				

DESIGN AND SPECIFICATIONS ARE SUBJECT TO CHANGES WITHOUT PRIOR NOTICE 01-25

OPTIONS	RANGER Neo Rack +	RANGER Neo Rack 2	RANGER Neo Rack 3	RANGER Neo Rack 4
Advanced DAB/DAB+ analyzer	Available	Available	Available	Available
Advanced FM analyzer	Available	Available	Available	Available
GPS Coverage Analysis	Available	Available	Included	Included
OPM + Optical-to-RF converter + WiFi 5 GHz + LTE 2.6 GHz + 6 GHz RF input	Available	Available	Available	Available
WiFi 5 GHz + LTE 2,6 GHz + Entrada RF 6 GHz	Available	Available	Available	Available

The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI Trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

## PROWATCH Neo: For 24/7 MONITORING

This evolution of RANGER Neo hardware, in addition to signal analysis, is optimized for 24/7 signal monitoring. It allows its integration in systems using SNMP protocol.



## PORTABLE VERSION AVAILABLE

The RANGER Neo are available as a portable platform with the same features found in their rack versions. With a 7" touch screen and **more than 4 hours of battery operation time**, as well as all the functions of the rack versions in a very compact and light tool (about 2 kg) that is shock protected. Perfect for the field work.