

ATLAS

NEXT-GENERATION SPECTRUM & BROADCAST ANALYZER

THE ALL-IN-ONE ANALYZER

www.promaxelectronics.com





THE UNIVERSAL BROADCAST ANALYZER

FOR THOSE WHO DO NOT COMPROMISE

and equip themselves with top-shelf test equipment only, we created **ATLAS NG**, a multipurpose and featured packed spectrum analyzer which covers the most stringent requirements for broadcast professionals. DVB-S2x, ATSC 3.0, IPTV, Fiber optics, 3G-SDI, Transport stream ASI, Wi-Fi, OTT... all checked!

The new outer frame offers extreme ruggedness while featuring a larger 10" touch screen and maximizing grip and ease of handling.



ATSC 3.0 AND S2x
NEXT-GENERATION TECHNOLOGIES.



6 GHz FREQUENCY RANGE
INTERFERENCE MITIGATION IN MODERN WIRELESS NETWORKS.



4K UHD VIDEO DEMODULATION
INCORPORATES HDMI™ 1.4 CONNECTIVITY.



SDI INPUT
BROADCAST STUDIOS AND OB VANS.



FIBER OPTICS, IPTV, OTT, WiFi...
OUTSTANDING I/O CAPABILITIES.



10" MULTITOUCH SCREEN
HIGHLY INTUITIVE CONTROL.



ATSC 3.0, DVB-S2x AND MORE...



ATSC 3.0
ROUTE & MMT ENCODING.



DVB-S2x
NEW SATELLITE TECHNOLOGY.



DVB-S2/T2/C2
FOR SATELLITE, TERRESTRIAL AND CABLE.



ISDB-T
SELECTABLE LAYERS AND EWBS.

THE LATEST BROADCAST TECHNOLOGIES:

New television standards such as **ATSC 3.0** push forward frontiers in what technology is capable of. ATSC 3.0 makes use of OFDM and as many as four simultaneous PLPs (Physical Layer Pipes) at the physical layer and modulation schemes up to 4096-QAM.

DVB-S2x is the new kid on the block in satellite broadcast. It provides higher throughputs and new signal modulation schemes that only the most advanced broadcast analyzers such as the **ATLAS NG** can handle.

64/128/256-APSK modulations, 5%, 10% and 15% reduced roll-off factors, improved filtering and carrier spacing, and channel bonding are just some of the new technologies adopted by this new standard, and of course, **ATLAS NG** is fully compatible.



NEW MORE POWERFUL 6 GHz SPECTRUM

PARTNER YOURSELF WITH AN ANALYZER

capable of taking measurements up to 6 GHz covering the S and C bands, where an increasing number of technologies are all fiercely competing for bandwidth.

Technologies using S and/or C band are: Satellite teleports, VSAT ground networks, Radar, Terrestrial microwave links, Broadband Wireless Access (BWA) networks (LTE, Wi-Max, 5G, etc.).

Applications: TV broadcast & data, Air navigation and maritime communications, Banking comms, E-government, Backhaul in remote areas or in mission-critical operations, Aircraft Radar altimeters, Weather/metereological stations, ITS (Intelligent Transport Systems), ISM (Industrial, Scientific and Medical), etc.

A 6 GHz spectrum analyzer becomes vital to identify and evaluate why systems and services are being disrupted by interferences.



HIGH SPEED DIGITAL PROCESSING
REAL-TIME SPECTRUM ANALYZER.



USER-DEFINABLE MARKERS
ACCURATE & DIRECT MEASUREMENTS.



2 kHz RESOLUTION FILTER
USER SELECTABLE FROM 2 TO 1000 kHz.



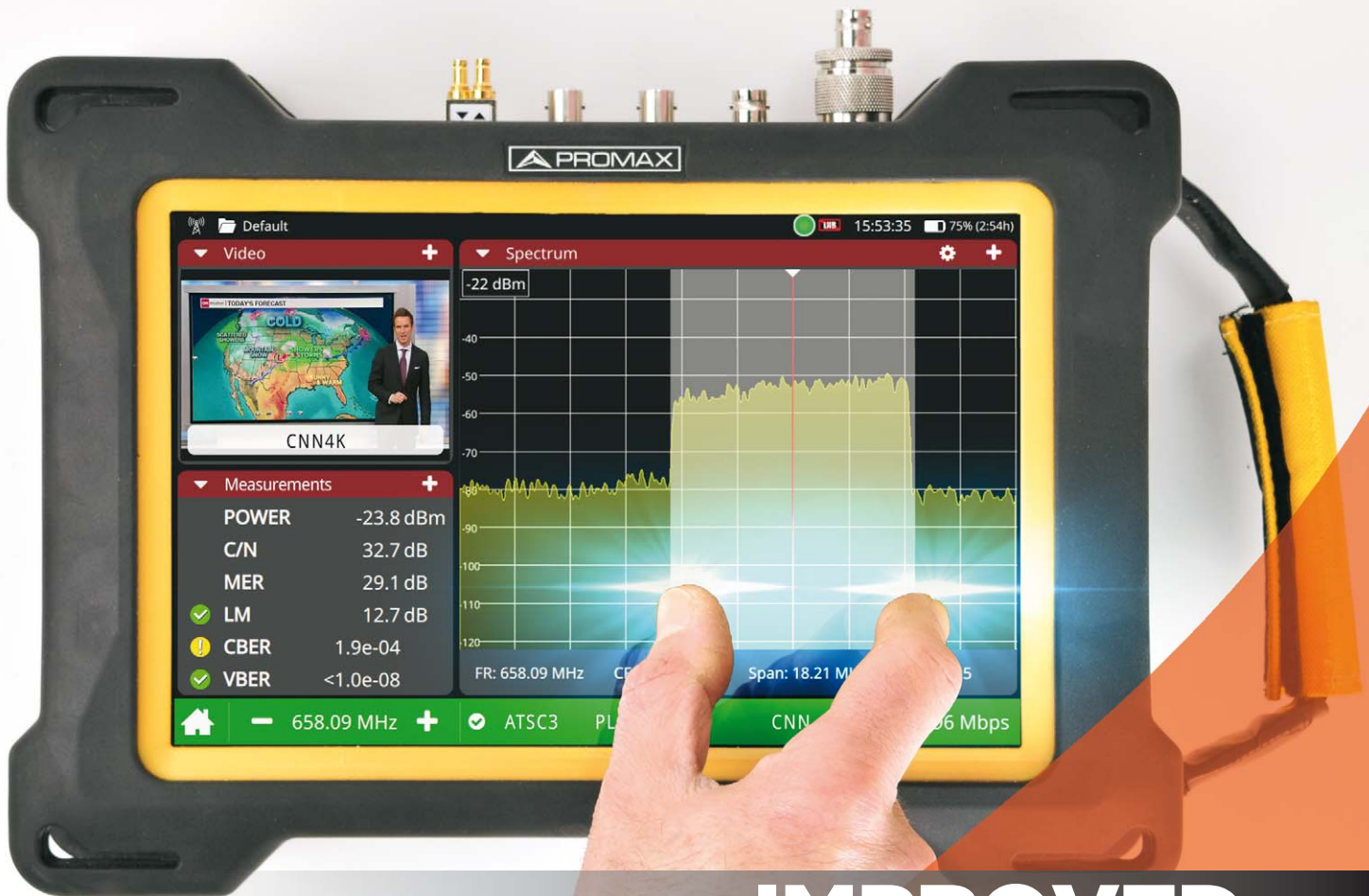
TI TERRESTRIAL INTERFERENCE
DETECTION AND MITIGATION.



DIRECT C-BAND READINGS
DIRECT CONNECTION TO YOUR LNA.



5G INTERFERENCE DETECTION
IMPROVE YOUR WIRELESS NETWORK PERFORMANCE.



IMPROVED USER EXPERIENCE

CUSTOMIZABLE DOCKING PANELS

Constellation

POWER	-11.3 dBm
C/N	51.1 dB
MER	>37.9 dB
CBER	1.6e-02
LBBER	<1.0e-08
LM	>37.9 dB

Mer by Carrier

Carrier:	3670	MER:	
Avg MER:	37.6 dB	Std Dev:	3.2 dB

Measurements

POWER	-37.3 dBm
C/N	29.3 dB
MER	22.4 dB
LM	6.0 dB
CBER	1.3e-03
VBER	<1.0e-06
PER	16796 00:12:55
FR	633.0 MHz
BAND POWER	-20.0 dBm

Video Values

Service:	Clan HD	Audio PID:	1503 (0x5DF)
Provider:	RTVE	Bitrate:	190 kbps
Network:	RGE2	Codec:	DDPLUS
SID:	40001 (0x9C41)	Scrambled:	No
LCN:	---	Languages:	spa, qaa
TSID:	40000 (0x9C40)	Subtitles:	spa, qaa
NID:	12549 (0x3105)	Audio desc:	spa
ONID:	8916 (0x22D4)	Teletext:	Yes
APP:	1		
URL:	---		
Video PID:	1501 (0x5DD)	Audio PID:	1503 (0x5DF)
Bitrate:	2147 kbps	Bitrate:	190 kbps
Codec:	H264	Codec:	DDPLUS
HP@L4.1		Language:	spa
1920x1080i 16:9 25 Hz		48 kHz stereo 32 bit	



ALL-IN-ONE MULTIFUNCTION ANALYZER

INCLUDES A 3G SDI INPUT

Finding a meter that could close the gap between the studio and transmission departments has been a long time coming, but it is finally here.

The **ATLAS NG** runs full 3G-SDI signal diagnosis, including a professional audio meter and eye diagram, and features an external SDI input for that task, other than the standard ASI input and output.

IPTV ANALYZER

The omnipresence of IP technology in the broadcast industry makes it compulsory for an analyzer to be capable of feeding from IPTV signals and monitor them.

Therefore, it becomes essential to have at hand a tester that can monitor and picture IPTV streams.



SPECTRUM ANALYZER



TV ANALYZER



IPTV ANALYZER



ASI ANALYZER



SDI ANALYZER



WiFi ANALYZER



OTT ANALYZER



ETHERNET TEST



FANTASTIC CONNECTIVITY



N-TYPE UNIVERSAL INPUT
MORE ROBUST. BETTER RF PERFORMANCE.



OPTICAL FIBER
OPTIONAL SELECTIVE POWER METER AND CONVERTER.



1 PPS INPUT
FOR GPS CLOCK SYNCHRONIZATION.



ASI-SDI INPUT/OUTPUT
FOR BROADCAST ENVIRONMENTS.



SFP+ EXPANSION PORT
READY FOR FUTURE APPLICATIONS.



IPTV INPUT
DEDICATED RJ45 PORT.



USB 3.0 + 8 GB INTERNAL MEMORY
FAST DATA TRANSFER & SOFTWARE UPDATES.



ETHERNET PORT
WIRING TEST AND REMOTE CONTROL.



COMMON INTERFACE
SCRAMBLED SERVICES DE-ENCRYPTION.



ULTRA HD: SUPPORTS HDMI™ 1.4b
2.9 GB/S UP TO 3840x2160 @30 Hz

SPECIFICATIONS	ATLAS NG - NEXT GENERATION SPECTRUM AND BROADCAST ANALYZER	
BROADCAST STANDARDS Digital terrestrial TV / Radio Digital cable Digital satellite Analogue	DVB-T, DVB-T2 (T2-base, T2-lite), ISDB-T/Tb (full seg / 1seg), ATSC 1.0, ATSC 3.0, DAB, DAB+ DVB-C, DVB-C2, J.83 annex-B, 16/64/256-QAM DVB-S, DVB-S2, DVB-S2x, DSS, QPSK Analogue terrestrial, FM RDS	
DISPLAY	10.1" multitouch 16:9 color TFT. 850 cd/m ²	
INPUTS AND OUTPUTS	<ul style="list-style-type: none"> - Universal RF input (N-type, female 50 Ω) - ASI/SDI input and output (BNC female, 75 Ω 3 Gbps) - SPF+ connector - Analogue audio/video input (3.5 mm jack) - HDMI™ output (v1.4b up to 3840x2160 pixels @30 Hz) - USB 2.0 (Type C). Mass storage/remote control commands - Ethernet (RJ45) for webControl/remote control commands 	<ul style="list-style-type: none"> - Optical input (FC/APC, female) - 1 PPS / 10 MHz reference - IPTV input (RJ45 Ethernet 10/100/1000 Mbps) - Stereo headphone audio output (3.5 mm jack) - USB 3.0 host (A-type USB-CDC devices) - CAM (DVB-CI compliant CAM module input)
REMOTE CONTROL	Control commands, webControl interface (IP control input and WiFi) and SNMP protocol (IP control input and WiFi)	
FUNCTIONS	<ul style="list-style-type: none"> - Constellation diagram - LTE ingress test - Dynamic echoes analysis - StealthID (instant identification of tuning parameters) - PLS (Physical Layer Scrambling) - Ultra fast Spectrum analyzer - 4K decoder - MAX and MIN hold - FM RDS measurement and decoding - Screenshots and Datalogger for measurement reports - Beacon-Flyaways SNG and VSAT - Wideband LNB 	<ul style="list-style-type: none"> - WiFi - LTE 1.8 GHz - OTT - Service Recording - Field strength measurement - Task planner - Merogram - Spectrogram - Signal monitoring - Remote control (webControl) - MER by carrier - GPS (included) coverage analysis - Video/Audio Streaming - SCAN + TILT
TV ANALYZER OPERATING MODE Frequency margin Measurements FM RDS Analogue terrestrial TV Digital terrestrial TV (standard-dependant) Optical LNB (OP-006-PS option) Video codecs Audio codecs Transport Stream	45 to 1000 MHz (terrestrial), 250 to 2350 MHz (satellite). 1 kHz frequency resolution. Level, Freq deviation (MPX, L+R, L-R, L/R/stereo pilot/RDS pilot), ITU-R SM.1268-2/SM.1268-4 histogram Level, C/N, V/A ratio (PAL/SECAM/NTSC M/N/B/G/I/D/K/L) Power, CBER, VBER, MER, C/N, LBER, Link Margin, BER, BCH ESR, LDPC iterations, PER, SER, Noise Margin, C/N 1310/1490/1550 nm, Optical-To RF (terrestrial/satellite bands) conversion H.265 4k UHD, H.264 4k UHD, MPEG-4 HD/SD, MPEG-2 MPEG-1, MPEG-2, AAC, HE-AAC, Dolby Digital, Dolby Digital Plus. Digital and analogue demodulation MPEG-2 protocol, max recording bitrate 200 Mbps (8 GB internal memory expandable via USB) Transport Stream analyzer: PSI/SI tables, bitrate per service graph, alarms logging and analysis (ETSI TR101 290 v1.2.1)	
SPECTRUM ANALYZER MODE	5 MHz to 6 GHz. Measurements: Power, C/N, Frequency. Includes 4 delta markers with frequency and level measurement.	
IPTV OPERATING MODE Measurements Features	Multicast/unicast streams (reception, measurement and recording) Jitter, packet rate, histogram+jitter, Inter Packet Arrival Time IGMP v1/v2/v3, VLAN support, Multicast discovery, Video/Audio payout, T2MI&BTS reception	
SDI OPERATING MODE	3 Gbps input/output. SD-SDI, HD-SDI and 3G-SDI compatible. Eye statistical diagram, CRC error detection, 16 AES3 audio channel monitoring, LPCM audio loudness meter	
WIFI ANALYZER OPERATING MODE	Spectrum analyzer + WiFi dongle	
OTT ANALYZER OPERATING MODE	Supports MPEG-DASH and HLS. Codecs H.265, H.264, MPEG-2, VP8, VP9, MVC, WMV9, JPEG/MJPEG, VC-1	
ASI-TS OPERATING MODE	Supports TS, T2MI, BTS	
EXTERNAL UNITS POWER SUPPLY	5/12/13/15/18/24 V + 22 kHz (satellite band) with DiSEqC 1.2/2.2, SaTCR/SCD (EN50494), dCSS/SCD2 (EN50607)	
POWER SUPPLY Battery operation time	12 V external power supply or internal 7.4 V 18.3 Ah Li-po battery with LED status indication > 4 h with Smart power management	
INCLUDED ACCESSORIES	External 12 V power supply, car lighter adapter, quick referece guide, RF adapters, GPS, heavy duty transport case	
DIMENSIONS AND WEIGHT	304 (W.) x 218 (H.) x 83 (D.) mm, 3.4 kg	
OPTIONS	OP-006-PS	Optical fibre: Selective optical power meter + optical to RF converter
	OP-006-FM	Advanced measurements for FM radio
	OP-006-DAB	Advanced measurements for DAB/DAB+ digital radio