PROMAX

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
SUPPORTING HDMI 1.4 PROTOCOL.

SDI INPUT
BROADCAST STUDIOS AND OB VANS.

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

10" MULTITOUCH SCREEN
HIGHLY INTUITIVE CONTROL.

ATLAS

PROMAX

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
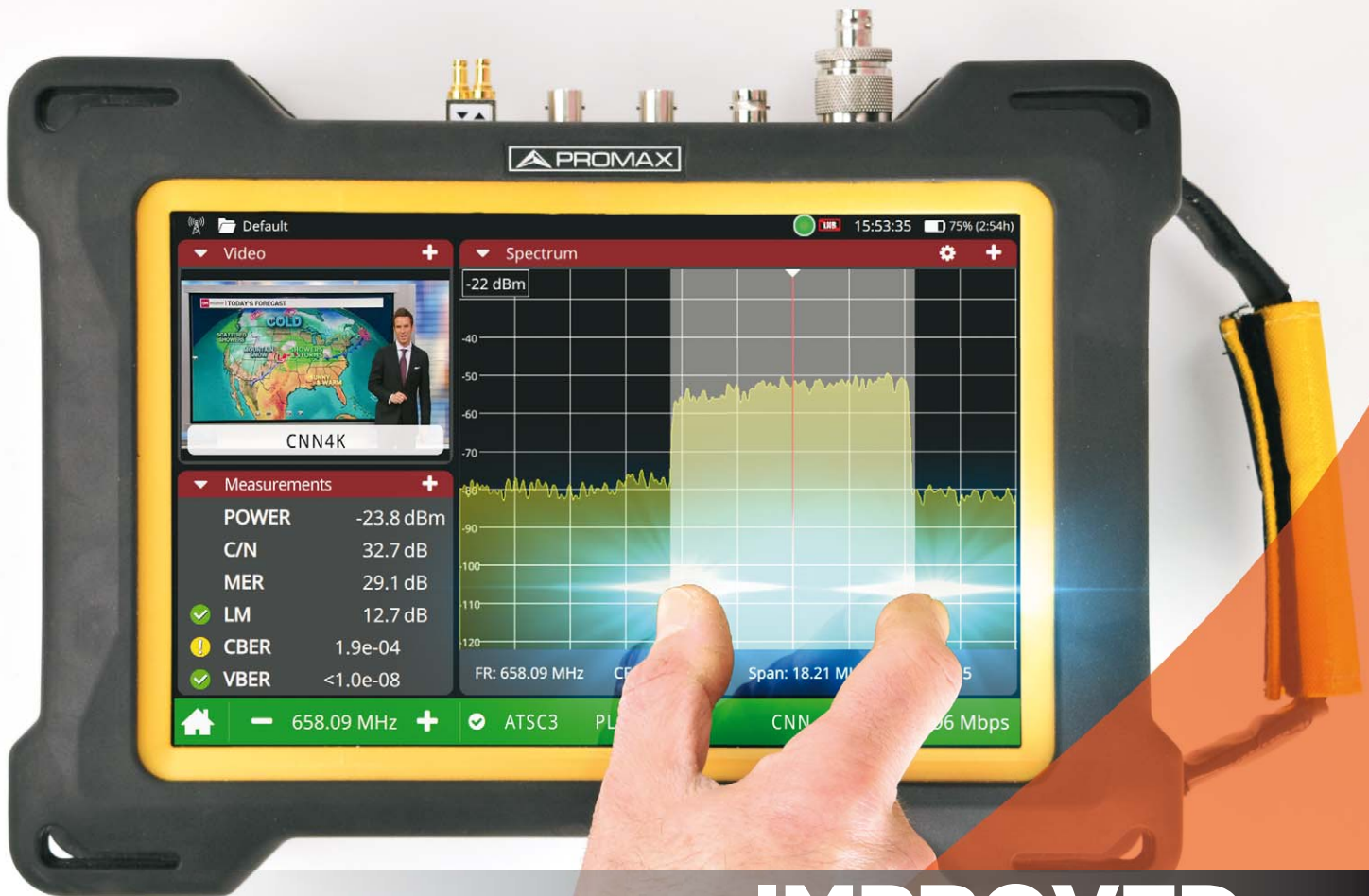USER SELECTABLE FROM 2 TO 1000 kHz.

TI TERRESTRIAL INTERFERENCE
DETECTION AND MITIGATION.

DIRECT C-BAND READINGS
DIRECT CONNECTION TO YOUR LNA.

5G INTERFERENCE DETECTION
IMPROVE YOUR WIRELESS NETWORK PERFORMANCE.

PROMAX

IMPROVED
USER EXPERIENCE
CUSTOMIZABLE DOCKING PANELS

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.

↘ SIMULTANEOUS 4 STREAMS 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. The flexibility of IPTV allows to flood a network with multiple streams.

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

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
4 STREAMS SIMULTANEOUSLY.

USB 3.0
FAST DATA TRANSFER & SOFTWARE UPDATES.

ETHERNET PORT
WIRING TEST AND REMOTE CONTROL.

COMMON INTERFACE
SCRAMBLED SERVICES DE-ENCRYPTION.

UHD-READY HDMI 1.4
UHD INTERFACE WITH EXTERNAL MONITORS.

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, ATSC 1.0, ATSC 3.0, DAB, DAB+ DVB-C, DVB-C2, J.83 annex-B DVB-S, DVB-S2, DVB-S2x, DSS Analogue terrestrial, FM RDS
DISPLAY	10.1" multitouch 16:9 color TFT. 850 cd/m²
INPUTS AND OUTPUTS	- Universal RF input (N-type, female 50 Ω) - Optical input (FC/APC, female) - ASI/SDI input and output (BNC female, 75 Ω 3 Gbps) - 1 PPS / 10 MHz reference - SPF+ connector - IPTV input (RJ45 Ethernet 10/100/1000 Mbps) - Analogue audio/video input (3.5 mm jack) - Stereo headphone audio output (3.5 mm jack) - HDMI output (v1.4b up to 3840x2160 pixels @30 Hz) - USB 3.0 host (A-type USB-CDC devices) - USB 2.0 (Micro-B). Mass storage/remote control commands - CAM (DVB-CI compliant CAM module input) - Ethernet (RJ45) for webControl/remote control commands
REMOTE CONTROL	Control commands, webControl interface (IP control input and WiFi) and SNMP protocol (IP control input and WiFi)
FUNCTIONS	- Constellation diagram - Beacon-Flyaways SND and VSAT - Coverage analysis - LTE ingress test - Wideband LNB - Video/Audio Streaming - Dynamic echoes analysis - WiFi - SCAN + TILT - StealthID (instant identification of - LTE 1.8 GHz - TS recording tuningparameters) - OTT - TS analysis - PLS (Physical Layer Scrambling) - Service Recording - IPTV multicast measurement and - Ultra fast Spectrum analyzer - Field strength measurement decoding - 4K decoder - Task planner - Shoulder attenuation - MAX and MIN hold - Merogram - Network delay - FM RDS radio measurement and - Spectrogram - DVB-T2 MI analysis decoding - Signal monitoring - Eye diagram (SDI) - Screenshots and Datalogger for - Remote control (webControl) - ALP recording measurement reports - MER by carrier - Carrier Frequency Drift Test
TV ANALYZER OPERATING MODE Frequency margin Measurements FM RDS Analogue terrestrial TV Digital terrestrial TV (standard-dependant) Optical LNB Video codecs Audio codecs Transport Stream	45 to 1000 MHz (terrestrial), 250 to 2350 MHz (satellite) 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-2 MPEG-1, MPEG-2, AAC, HE-AAC, Dolby Digital, Dolby Digital Plus 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	From 5 MHz to 6 GHz. Measurements: Power, C/N, Frequency
IPTV OPERATING MODE Measurements Features	Up to 4 simultaneous 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 playout, 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
DIMENSIONS AND WEIGHT	304 (W.) x 218 (H.) x 83 (D.) mm, 3.4 kg

OPTIONS	
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

DESIGN AND SPECIFICATIONS ARE SUBJECT TO CHANGES WITHOUT PRIOR NOTICE.   11/22

PROMAX