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.

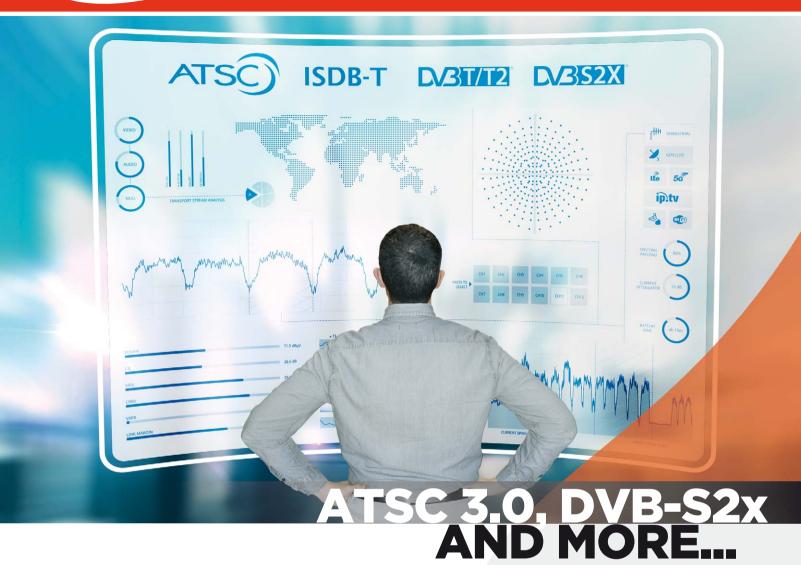**FIBER OPTICS, IPTV, OTT, WiFi...**
OUTSTANDING I/O CAPABILITIES.

10" MULTITOUCH SCREEN
HIGHLY INTUITIVE CONTROL.

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
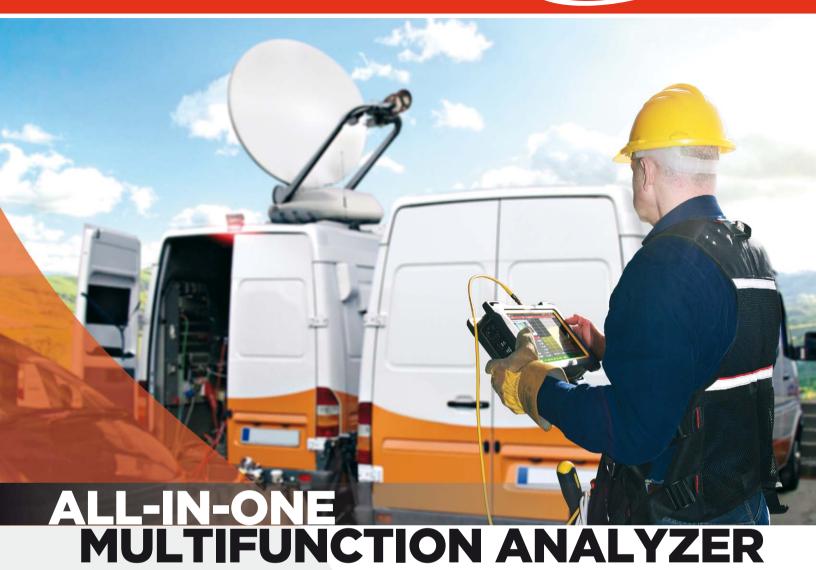IMPROVE YOUR WIRELESS NETWORK PERFORMANCE.

IMPROVED
USER EXPERIENCE
CUSTOMIZABLE DOCKING PANELS
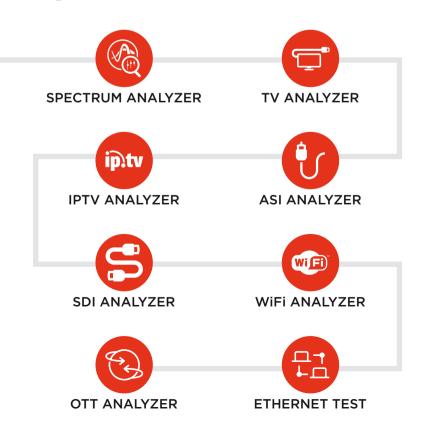
ATLAS

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 + 8 GB INTERNAL MEMORY
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/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/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 (Type C). 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　- GPS (included) 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 - 8 GB internal memory, expandable via USB
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). 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	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
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	

DESIGN AND SPECIFICATIONS ARE SUBJECT TO CHANGES WITHOUT PRIOR NOTICE.　05/23

PROMAX