

NOMAD

- As technologies become more and more complex, using NOMAD will give invaluable insight into modern media signal behaviorisms
- NOMAD covers the monitoring needs encountered in hybrid IP multicast, OTT and RF networks
- Analysis of RF transmitted DVB signals as well as OTT and Multicast/Unicast IP transmissions
- Comprehensive IP packet analysis tools, NOMAD is ideal for IP transport understanding regardless of the media transported
- NOMAD contains a WiFi zone, by pointing a laptop towards this, the unit is ready for use
- Designed to replace old-school PCI cards, USB based dongles and other laptop dependent devices, NOMAD is a complete free-standing unit with its own CPU
- Can be left to monitor signals by itself without the need for a host system
- The ultimate all-in-one monitoring and analysis solution for the technician on the move





NOMAD INTERFACES

ETHERNET

- 10/100/1000T Gigabit Ethernet interface for video/data analysis
- SFP port for optical Gigabit connectivity
- Optional second Gigabit Ethernet port
- Web-based management interface optionally on all ports
- SSH/TELNET terminal
- Relay video multicasts to 3rd party targets using RDP
- Laser power received level for fault finding on SFP

WiFi

- Provides 2.4 GHz Wireless Access Point service
- No setup Nomad is WiFi Zone
- USB 2.0 IEEE 802.11 b/g/n 150Mbit/s dongle





NOMAD INTERFACES

DVB-S/S2 SATELLITE

- Supports DVB-S and DVB-S2 8PSK, 16APSK, 32APSK, GOLD CODES
- L-band input from 950 2160 MHz
- Symbol rate range between 1 45 MS/s
- 13V/18V/22kHz and DiseqC 1.0 capable for switch control
- High-end RF performance with constellation diagram and over 20 RF parameters
- Auto-scan feature

DVB-T/T2/C TERRESTRIAL & CABLE

- Supports DVB-T EN 300-744 and DVB-T2 EN-302-755 (v1.3.1)
- Supports ITU.T J.83 Annex A/C for cable networks (QAM16 up to QAM256)
- Frequency range: 43 1002 MHz. Bandwidth 5, 6, 7 and 8 MHz
- Channel Impulse Response diagram & constellation diagram for DVB-T/T2



NOMAD INTERFACES

1PPS

- Offers GPS syncronization down to 0.1 us accuracy
- Allows absolute network delay in SFN/T2MI networks to be measured
- Allows Center Frequency Offset measurements on DVB-T/T2

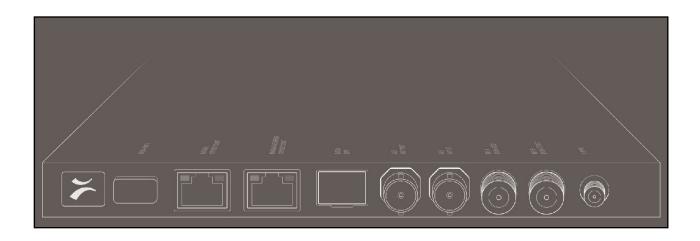
ASI

- ASI input according to EN 50083-9, Annex B
- Supports Burst mode, Spread Mode and legacy M2S
- Output selectable feed from ASI, DVB-T/T2/C or DVB-S/S2 input
- Up to 211Mbit/s incoming rate (line-speed ASI)





NOMAD PHYSICAL FEATURES



INTERFACES

- USB-WiFi
- Data A 10/100/1000T
- Management 10/100/1000T
- Data B SFP
- ASI Output
- ASI Input
- RF A DVB-S/S2 Satellite
- RF B DVB-T/T2/C Terrestrial & Cable
- 1PPS
- Power 12V / Serial

PHYSICAL

- Dimensions: width x length x height (mm): 180x230x20
- Weight: 0.9 kg
- Power usage (max): 22 Watts
- Power supply: External power unit +12V, 1.8A (included)
- Operating temperature: -20 up to +45 degrees C
- Operating humidity: 5% up to 95% noncondensing
- Initial setup by Wi-Fi, Ethernet or separate USB Type-A cable (included)

"NOMAD is a breakthrough design with close to every conceivable interface for media signal monitoring and analysis"



NOMAD TECHNOLOGIES

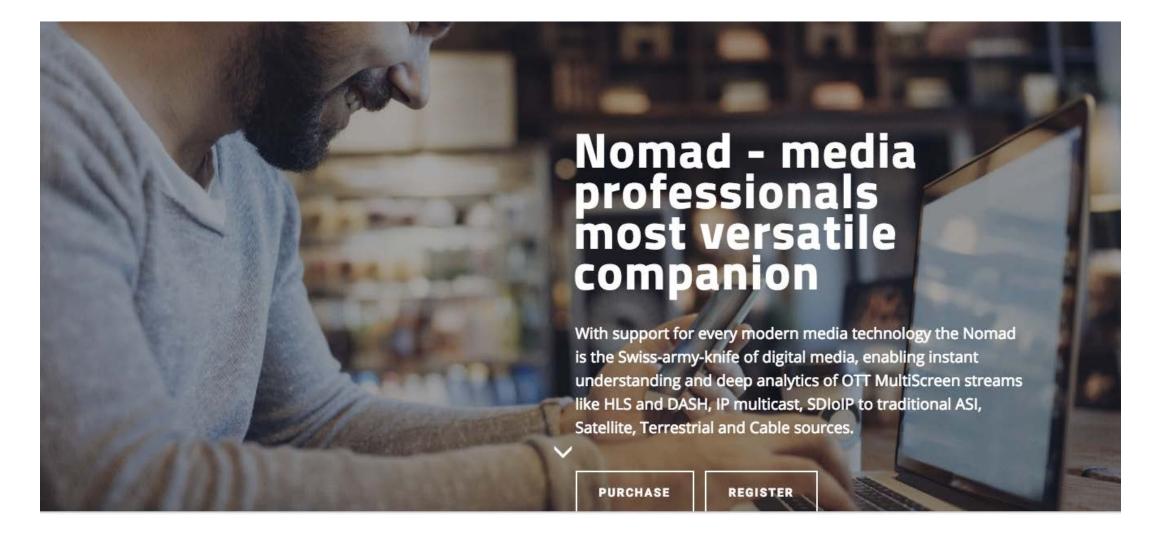
- NOMAD features a plethora of our award-winning and patented technologies
- Culmination of 12 years of accumulated engineering knowledge and R&D in IP and broadcast monitoring
- NOMADs user interface is via Bridge
 Technologies' MediaWindow™ visualisation
 technology, which allows complex structures and
 data to be understood
- Technologies used by experts/non-experts, to analyse and take corrective actions quickly and easily

| WEB INTERFACE | PACKET ANALYSIS | OTT/MULTISCREEN | MULTICAST/UNICAST IP | RDP™ FORWARDING AND RECORDING |
|--|---|---|--|--|
| Intuitive GUI for remote access via Wi-Fi or cabled Ethernet | Accurate packet behaviour, IAT histogram, protocol analysis and traffic, autodetection of IP uni/multicast | HLS, HDS, M-DASH, SmoothStream™, RTMP, post-CDN URL token support and manifest validation. Innovative framework for measuring delay of OTT service through distribution chain | Microsecond-accurate and detailed multicast packet monitoring, analysis and alarming with readout and alarming on key parameters relevant to video | Return Data Path forwarding of any transport stream monitored with automated alarm triggered recording to 32GB of on-board Flash memory |
| GOLD TS™ | POWERFUL IP TOOLS | MEDIA FORMAT SUPPORT | MEDIA WINDOW™ | ETR290 ANALYTICS |
| Innovative Gold TS framework: part of the award-winning ETR290 Engine for recording a perfect transport stream table set and then can be compared and alarmed against a template | ICMP PING and TraceRoute can be done from inside a location remotely and PING can be setup to alarm if remote device stops responding | MPEG2-TS. H.264/AVC HD, H265/HEVC 4K, AAC, PCM Audio, SCTE-35 signalling, T2-MI encapsulation and more | Total packet understanding with the patented MediaWindow™ visualisation technology for RTP/UDP uni- and multicasts | The award-winning ETR290 Engine with detailed analytics of Priority 1, 2 and 3 tests plus extensions to test CA behaviour, alarm history view, timeline view and much more |
| OBJECTIVE QoE ENGINE | AUTONOMOUS OPERATIONS | PCAP CAPTURES | SDIoIP | LOTS OF EXPANSION CAPABILITIES |
| Freeze frame, color frame, audio silence detection on services from any NOMAD input | NOMAD is a completely freestanding unit with its own CPU and can perform without the need for any external host system | PCAP Ethernet packet capture onto on-board RAM, filesystem storage accessible via web interface for offline analysis using tools such as Wireshark or tcpdump | Compliant with SMPTE2022.6, 2022.7, IEEE4175 and AES67 IP- Streams for SDI analytics. AIMS and ASPEN compilant | Software options as the "bigger brothers" in the Bridge Technologies family |



www.nomadportable.com

NOMAD INTERFACES TECHNOLOGIES TECH SPEC



NOMAD DEMO

Open a web browser:

https://185.102.108.139



