



Advantech Wireless

www.AdvantechWireless.com

▪ VSAT Satellite Networks ▪ Satellite RF Converters & Amplifiers ▪ Terrestrial Microwave Communications ▪
▪ Satellite Modems ▪ Antennas & Controllers ▪ Routers ▪ Government & Military Applications ▪



Advantech
Wireless



SSPAs, Transceivers, BUCs, Frequency Converters & Satcom Antennas



Innovation.
World class performance.
Best ROI.

GaN SSPAs- Maximum Energy Efficiency and OPEX savings



High Reliability

Advantech Wireless' GaN-based HPSs and BUCs deliver unmatched performance and reliability.

The crystal lattice structure, and the high temperature handling capabilities of the GaN devices (over 300°C channel temperature), makes them extremely robust and reliable.

The breakdown voltage for GaN devices is above 100VDC, which makes them extremely difficult to damage. Significant for space applications, GaN is also inherently radiation-resistant.

Major OPEX savings

These innovative systems offer the best linearity and intermod performance in the market. It delivers significant savings in electric power usage (low OPEX), physical space and heat generation.

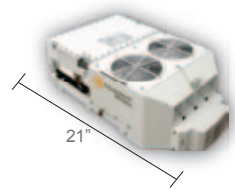
Unmatched Performance

Within the same footprint Advantech Wireless GaN-based units:

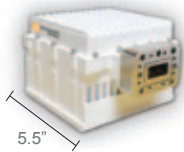
- Deliver double the RF power
- Are that 50% smaller (volume reduction)
- Generate 30% less heat
- Up to 70% less energy consumption!

Advantech Wireless based TT Series HPAs & BUCs

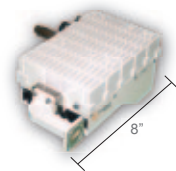
Our comprehensive product portfolio is MIL-STD-188-164A compliant and includes: C-Band 300W, C-Band 600W, X-Band 25W, Ku-Band 50W, Ku-BaNd 125W, Ku-Band 250W and X-Band 250W.



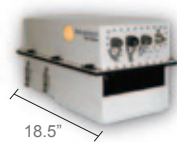
*C-Band 600W
TT Series - GaN
Consumes <1500W AC power*



*X-Band 25W
Weight 5.5lb
TT Series - GaN
Consumes <115W AC power*



*Ku-Band 50W
Extra-lightweight 6.6lb
TT Series - GaN
Consumes <275W AC power*



*Ku-Band 250W
Extra-lightweight 6.6lb
TT Series - GaN
Consumes <1200W AC power*

SapphireBlu™ - The Ultimate Solution for DTH TV (HDTV)



Pioneer technology & ground breaking performance



Awarded as Most Innovative Product of the Year, Advantech Wireless' SapphireBlu™ Series of UltraLinear™ GaN based High Power Amplifiers and BUCs is leading the way with ground breaking performance and pioneering technology.

With the new SapphireBlu™ Series of high power SSPAs able to reach now up to 6 KW in RF power, the Advantech Wireless line of GaN based SSPAs is well positioned to meet the most stringent environmental and the most demanding work conditions.

Featuring high power density in a compact, rugged and weatherproof package, the New SapphireBlu™ Class of UltraLinear™ GaN technology based solid state power amplifiers (SSPAs) and BUCs, exceed all barriers between Klystrons, TWTs and SSPAs.

- Low energy consumption
- High Efficiency
- UltraLinear™ designed for Multi Carriers Operations
- High Power
- High reliability
- Able to cover simultaneously all transponders of a specific satellite, regular or extended bands.

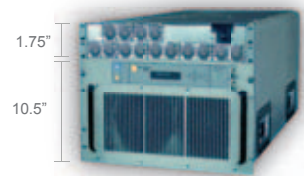
New SapphireBlu™ Series portfolio - MLT-STD-188-164A compliant

Advantech Wireless New SapphireBlu™ Series portfolio delivers unmatched performance, surpassing all technologies available on the market.

- 500W to 6000W X-Band
- 700W to 6000W C-Band
- 500W to 3000W Ku-Band



1250W Ku-Band
GaN Based - SapphireBlu™ Series



1250W Ku-Band
GaN Based - SapphireBlu™ Series

Combined with our high performance line of Satcom Antennas, these new systems are the only worldwide solution able to offer the maximum use of satellite bandwidth and power.

Summit GaN based Modular Systems - Maximizing your savings



Millions of dollars in Energy, Bandwidth and CAPEX savings

Advantech Wireless Summit Modular Systems are completely modular, with field replaceable RF or Power Supplies, solid-state power amplifier systems.

They deliver the highest linear power available and have 3 years warranty, due to increased GaN Technology reliability.

By saturating all transponders of an entire satellite and obtaining maximum bandwidth/power efficiency, you save millions of dollars in energy costs, Satellite bandwidth and CAPEX.

Direct to home TV solutions

The Advantech Wireless 2500W Ku-Band Hubmount UltraLinear™ Modular SSPA/SSPB is the ultimate solution for direct to home TV.



Modular design with built in redundancy 3K Ku-band System GaN Based - SapphireBlu™ Series

The power savings are 8 to 10dB compared to indoor Klystron. It comprises high power density in a compact, rugged, weather proof package. It can cover multiple transponders, it is full DVB-S2 enabled, rugged, weatherproof outdoor package, MIL-STD-188-164A Compliant.

The ultimate solution for wide bandwidth, ultra high power satellite teleports uplinks

The Advantech Wireless 6600W X-Band and 6600W C-Band are the ideal solution for wide bandwidth, ultra high power satellite teleports uplinks. They are the maximum/power combination that you will even need.

The indoor modular package has an optional built in redundant L-Band interface for maximum link availability.

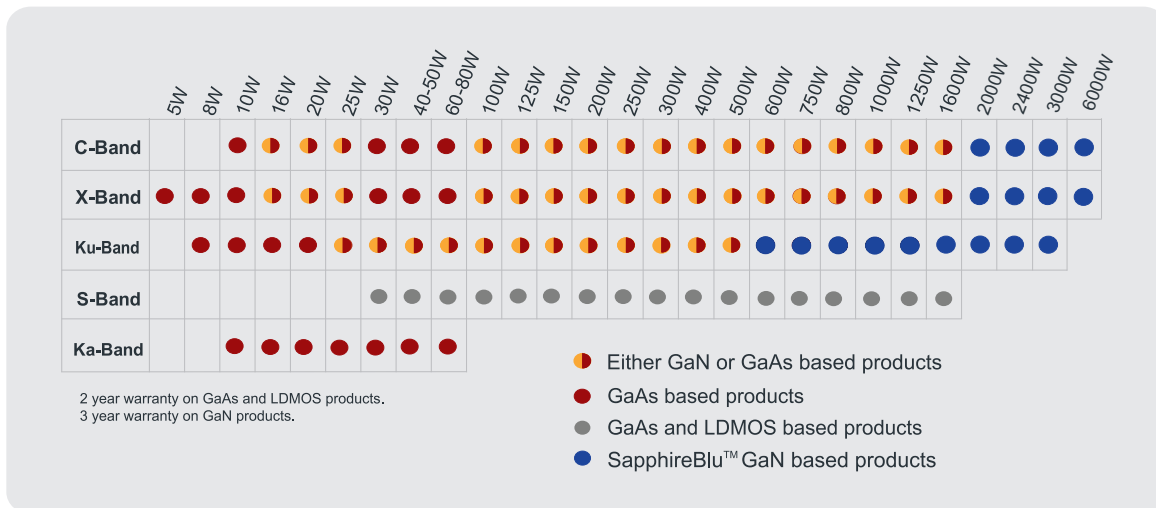


6.6W C-Band or X-Band Rackmount SSPA GaN Based - SapphireBlu™ Series

Solid State Power Amplifiers, Transceivers & BUCs



Advantech Wireless offers the newest, most reliable and efficient technologies and products in the market. Our comprehensive product portfolio meets all your needs in terms of power and band.



1250W
Ku-Band



3000W
Ku-Band



300W
S-Band



600W
C-Band



80W
Ka-Band



20W
Ka-Band



12kW Solid State Pulse
Amplifier



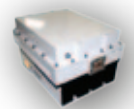
125W
Ku-Band



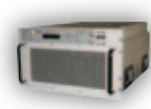
50W
X-Band



250W
Ku-Band



200W
X-Band



1250W
Ku Rack-mount

Satellite Frequency Converters



Satellite Frequency Converters



Frequency Converter

MIL-STD-188-164A compliant

The Advantech Wireless HP range of converters uses the latest technology in conversion, local and remote control providing the ultimate in performance and user friendly operation at a very competitive price. The spectral purity, low phase noise and stability exceed the requirements of all major international satellite network operators.

The high power range of converters is particularly well suited for use in Teleports, Broadcast, Military, Lawful intercept and Hub systems where compact redundancy is required.

Single/Dual/Quad Frequency Converters

The single, dual and quad frequency converters are available in DBS Band, C-Band, X-Band, Ku-Band, L-Band, S-Band, Ka-Band, Muti Ka-Band.

- L-Band IF or 70/140 MHz IF
- Cost effective solution
- Fully compliant with IESS 308/309/310 and MIL-STD-188-164 / Phase noise 10-20 dB better than IESS 308/309/310
- High linearity
- Low (flat) group delay
- Front panel control (local)
- Full remote control (remote)
- Hot swap

Redundant Frequency Converters

The Redundant frequency converters are available in DBS Band, C-Band, X-Band, Ku-Band and L-Band.

- Two hot swappable converters in 1U
- Cost effective solution
- Full range of block and agile converters
- Meets or exceeds IESS 308/309/310 requirements
- High linearity
- Low (flat) group delay
- Front panel control (local)
- Full remote control (remote)



Hot swappable converter trays

Outdoor Converters

Advantech Wireless offers a full line of frequency converters for outdoor applications. Available in all Satcom bands in S, C, X DBS, Ku and Ka commercial and military bands based on HP series of Advantech Wireless converters.

S, C, X DBS, Ku and Ka Block Up-Converters Weatherproof Outdoor

- L-band IF
- High stability and excellent phase noise characteristics exceeds IESS 308/309 requirements
- Excellent spurious emission performance
- Compact weather proof package to IP66



*Quadband L to Ka
27.5 -31 GHz
Frequency Selectable*

Antennas and Controllers - World leading performance



Advantech Wireless offers a complete line of **Mobile Antennas**, **Quick Deploy Fly-Away Antennas** and **the largest Fixed Broadcast Antennas** at the best possible price. Designed with the latest technology to meet and exceed industry standards, Advantech Wireless' Antenna Systems, Software and Antenna Controllers offer world-leading performance and unmatched quality. Advantech Wireless' Drive-Away Antennas are easy to operate and ready to install in most vehicles. Includes auto-pointing iPOINT™ Controller and proven reliability.

Enterprise Class - Reliable satellite acquisition

Advantech Wireless Enterprise Class antennas are easy to operate. They are light, compact, robust and automatic one button satellite acquisition enabled. Ready for service in under two minutes. The rooftop case houses the drive control, positioning hardware, amplifier and reflector. Available in 1.2m or 1.5m Ku-Band. Includes auto-pointing iPOINT™ Controller.



Pioneer Class - Completely automatic

The Advantech Wireless Pioneer Class antennas are completely automatic, one button acquisition of required satellite enabled hence it can be operated by anyone. Ready to operate in less than two minutes. Available with integrated Tx. Power up to 300W Ku-Band GaN 1:1 redundant system. Available in 1.2m Ku-Band reflector.

ARCTIC Ku-Class. Drive-Away VSAT Terminal

1.2m High Gain Dual Optic Reflector, SMC or optional Carbon Fiber. Compact and Robust. Acquires in < 3 minutes. Integrated with Ultra-Compact 50W Ku-band GaN based BUC and A-SAT™ Modem. Simple Operation – Requires no Satellite Communication Expertise. Completely automatic one button acquisition of required satellite.



INTRAC™ Antenna Control Units

- Available for antennas from 1.2m to 35m diameter
- High performance and high reliability
- INTRAC™ orbit modeling algorithm
- Inclined Orbit Tracking
- Accurately tracks satellites with orbital inclinations up to and beyond 10°
- Compatible with INTELSAT & EUTELSAT SCPC tracking specifications
- Resilient to tracking signal loss, maintaining integrity for up to 72 hours
- Non-volatile memory ensures tracking is resumed after power failure
- Full M&C control via RS232 / RS422 interface
- Can incorporate IBRL-7 integral Beacon Receiver



Auto-Pointing iPOINT™ Controller (Board or Rack mountable)

- Simple operation. Completely automatic one button acquisition of required satellite
- No additional equipment required.
- Uses industry standard position transducers
- Uses GPS receiver for accurate geographic location
- Supports C, Ku, L, Ka and X-Band Satellites
- Could be integrated in a deployable antenna system



Advantech
Wireless

Next Generation VSAT hubs and terminals



Increasing performance and
bandwidth utilization

A-SAT™ - Maximizing satellite bandwidth efficiency



Well ahead of any solution available in the market, Advantech Wireless developed a revolutionary VSAT Discovery Hubs product line-up based on Adaptive Satellite Access Technology (A-SAT™).

Maximizing satellite bandwidth efficiency

A-SAT™ is beyond dual mode DVB-RCS/TDMA-SCPC, it monitors channel utilization and switches the satellite access method and MODCOD seamlessly for the return channel to dynamically maximize the space segment utilization efficiency.

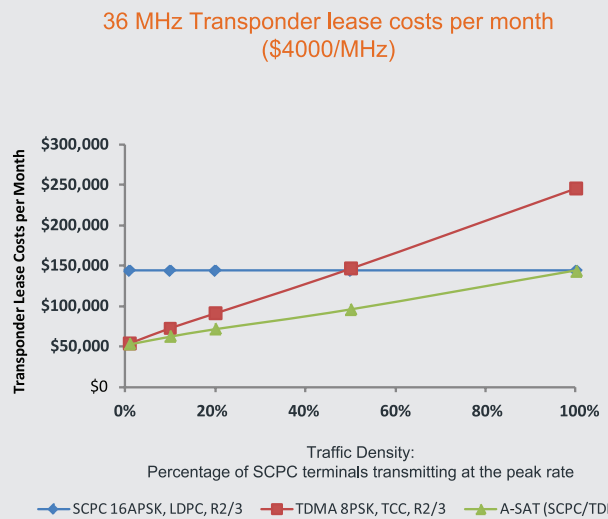
Additionally, by having TDMA and true SCPC technologies in a single platform, the switch between traffic patterns is efficiently supported and all risks of equipment obsolescence are mitigated.



Discovery Series VSAT with A-SAT™ Optimization



S6520 series A-SAT™ VSAT Modems



Minimize your OPEX
Potential savings of \$1M/year

High capacity VSAT Hub for HTS



Extended capacity, capability & efficiency

The Advantech Wireless Millennium high capacity VSAT hub is purposefully developed to meet the needs of large VSAT networks typically operating on High Throughput Satellites (HTS). The Millennium modular design is easily expanded as network size increases. It is ideally suited for Network Operators and Service Providers. Scalability allows CAPEX expenditures to match network growth. Virtual Network Operator (VNO) capability allows support of numerous virtual operators. VPN capability provides secure communications for sensitive information transfers.

A single rack can be configured to support upwards of 30,000 remote terminals and can support 1,000 Mbps of traffic to the remotes, spread across up to 5 different transponder/satellites and 5 DVB-S2 carriers. This single rack can also receive up to 480 Mbps of IP traffic generated by the remote terminal population.

The New Millennium Hub is designed to operate with all fixed satellite frequency bands (C, X, Ku, Ka-Band) and will support all of Advantech Wireless family of Remote terminals, known as SITs (Satellite Interactive Terminals). Star, star/mesh hybrid and high-capacity SCPC are all supported in the Millennium Hubs.



New Millennium Series High Capacity VSAT hub for HTS

The most scalable & most advanced in the market



Pay for capacity & capability only as your network grows

Advantech Wireless “Pay-as-you-Grow” Architecture offers the lowest initial capital investment, and is most cost efficient to expand from 1 to Multiple Beams and Satellites in a single platform.

Whether you need to service 10, 1,000 or 10,000 users—Advantech Wireless has the best solution. Mature technology, field-proven, remotely-upgradeable in an instant.

Product	Maximum Forward Link Mbps	Maximum Return Link Mbps	# Terminals Supported
Discovery 100	155	32	10 - 500
Discovery 200	n x155	96 (3x32)	100 - 1,500
Discovery 300	n x155	160 (5x32)	1,000 +
Raptor	155	32	10 - 500



VSAT Discovery Hubs

World’s most Advanced MF-TDMA MCD (Multi-Carrier Demodulator)

The Advanced Multi-Carrier Demodulator (MCD) from Advantech Wireless is a state of the art product for MF-TDMA networks. It has a flexible architecture which can be configured to support up to 96 return link MF-TDMA carriers on a single card and enables terminal CAPEX to be minimized compared to the competition.

CAPEX saving example

Let’s consider a TDMA network return link requirement of 8 Mbps. Using a single TDMA carrier demodulator would require all the remote terminals to be able to transmit at 8 Mbps even though their individual data throughput requirement may be 256 Kbps. Advantech Wireless can achieve the same network throughput using 32 MF-TDMA carriers at 256 Kbps. Therefore, instead of using a 2.4m, 8W remote terminal we are able to provide the same network capacity using 1.2m, 1W remote terminals.

The potential CAPEX savings for the remote terminals are huge and can enable network opportunities that have been considered too costly until now.

VSAT Terminals (TDMA and SCPC)



Advantech Wireless' has the most comprehensive line of VSAT terminals including outdoor weather-proof remote terminals.

All Advantech Wireless' DVB-RCS terminals come with embedded QoS and TCP Acceleration features. Options exist to incorporate encryption (IPSec) and VLAN operation, as well as optimized support for real-time applications such as VoIP and video conferencing.

- DVB-S2/ACM, DVB-S2X, DVB-RCS2, DVB-RCS/SCPC compliant
- Ultra wide band forward channel - 500MHz
- 1.5 and 3 Watt transmit output power options
- Covers 1 GHz of RF bandwidth, transmit and receive
- Power over Ethernet (POE)
- 100/1000BT Ethernet interface
- Audio antenna pointing aid for DIY installation

New **Ka-8000 Series Ka-Band Outdoor VSAT Terminal**



- Industry First entirely integrated Ka-Band VSAT Terminal
- Consists of modem, Ka-Band transmitter, receiver and antenna system
- Flexible waveforms and symbol rates

Antennas

1.2m High Gain Dual Optic Reflector, SMC or optional Carbon Fiber. Compact and Robust. Acquires in < 3 minutes. Integrated with Ultra-Compact 50W Ku-band GaN based BUC and A-SAT™ Modem. Simple Operation – Requires no Satellite Communication Expertise. Completely automatic one button acquisition of required satellite.



Terminal modem product range

Terminal	DVB-S/S2 Receive	MF-TDMA (RCS) Transmit	RCS	DVB-S2 (SCPC) Transmit	A-SAT™	SCADA (Sleep Mode)	Mesh Support	Rack Mount Unit	Ruggedized Enclosure	GPS Input	VoIP (CCP), QoS, PEP, VPN(1)
S4120	•	•				•					•
S4920	•	•				•			•		•
S5120	•	•						•		•	•
S5220	•	•					•	•		•	•
S5420	•	•		•				•		•	•
S5920	•	•				•			•	•	•
S6520	•	•		•	•			•		•	•
S6540	•	•			•			•		•	•
S6720	•	•		•	•			•		•	•
S6920	•	•		•				•	•	•	•
VR7000	•	•	•	•	•	•				•	•

Note (1): VPN support is a hardware option and designated with a 'V' (e.g. S4120V).

Sample Modems



S4120 ACM DVB-RCS VSAT



S5120 ACM DVB-RCS VSAT



S6520 series A-SAT™ VSAT modem



S6920 Ruggedized SCPC/RCS VSAT

SCPC Modems - Maximum flexibility & reliability



The Advantech Wireless high throughput, highly reliable and flexible family of SCPC modems features a variety of redundant and non-redundant configurations designed to meet the needs for the enterprise, broadcast markets and governments.

SCPC Broadcast Modulators & Modems



AMT – 75 Series

The AMT – 75 Series which encompasses ASI HD Video, Telco and IP interfaces in the same platform.

AMT – 75e DVB-S/S2 Modem

Combines SBM75e & SBD75e in one unit. Best Value for price in market. Proven reliability.

SBM75e Modulator

Aggregates up to 8 ASI inputs. IP, MPE or GSE encapsulation, routing, bridging.



SBD75e Demodulator

Provides up to 6 ASI outputs. Decapsulates MPE IP streams up to 512 PIDs. Single and dual demodulators options available.

Enterprise SCPC Modems

AMT – 30 Series

16kbps to 10 Mbps in 1 bps Steps. L-Band or 70 MHz Interfaces. BPSK, QPSK, 8PSK & 16QAM Operation. Bridging and/or IP Routing (standard). FEC: Viterbi-RS, TPC, eTPC, TCC. Multi-demod configurations, 4 to 16 L-Band Channels.

Configurations

- | | |
|---------------|-----------------------|
| • TX-only | Modulator only |
| • Rx- only | Dual Demodulator only |
| • Tx-Rx | Mod/Demod |
| • Tx-Rx | Mod/Dual-demod |
| • 4Rx - AMT34 | Quad-demod |
| • 16Rx | 16 channel Demod |

Military Modems

AMT – 73 L

MIL-STD-188-165A not only COMPLIANT but also DISA CERTIFIED.

Data Rates 64kbps – 52Mbps in 1bps steps. Optional eTPC Rates from 0.5 to 0.92. eTPC Extends data rate to 110Mbps. BPSK, QPSK, OQPSK, 8PSK & 16QAM.

Modem Data Protection Switch M:N, 1:1, 2:1 Redundant

Unique combination of 8 E1/T1 G.703 Telco and 1xIP Gateway data interface per modem. Flexible variety of redundant configurations. Redundant power supplies. Modular design for maximum flexibility. Hot swap capabilities for all modules. Flexible monitoring and control. Front panel display of status and control functions. Comprehensive set of interfaces:

- 8XE1/T1 G.703 + IP, RS-530, HSSI
- Support IF/L Band Switching



DVB & IP - Convergent solutions



Advantech Wireless manufactures solid state, embedded, efficient and reliable solutions for IP networking. They implement a variety of standard communication protocols and are easily integrated into existing networks.



FLS-100A

Key functions include:

- IP Encapsulator (IPE), MPE and GSE (IPE-422 IP)
- DVB TS Multiplexer,
- DVB-S2 Modulator
- ACM operation - Comprises all the major requirement components of the Forward Link Subsystem



IPE-422 IP

Encapsulator-Multiplexer

MPEG2-TS with MPE DSM-CC. DVB-MPE (Multi Protocol Encapsulation). 4x 10/100/1000 Base-T. ASI Input + 2x ASI Outputs. Encapsulation of forward IP traffic up to 80,000 packets/sec. Transport stream data rate up to 155Mbps.

Encapsulator-Multiplexer. Ability to Multiplex. Built-in ASI switch. Level 2 QOS support (MAC/PID). Software Upgradeable Rates. Redundancy Extensive control, monitoring and statistics via M&C Ethernet Port and Serial port. Embedded solution with AMT-75 Modem, SBM-75e Modulator or Standalone IPE-422 solution.



Performance Enhancing

Proxy (PEP-100, PEP-200, PEP-300)

Improves TCP performance over Satellite, Establishes TCP connections up to 500/sec (PEP100), 1000/sec (PEP200), 1500/sec (PEP300), does not modify the application protocol, totally transparent to the applications, maximum performance per single TCP connection, data and image compression and caching. Aware of network topology data throughput: 50Mbps (PEP 100), 100Mbps (PEP200), 155Mbps (PEP300).

R800 High Performance Router

High packet and data performance. Up to 200,000 packets per second (pps). Up to 3 Gbps data rate internal throughput. Full featured Layer 2 GigE Switch & Layer 3 GigE router. 7 GigE Ports. 3x10/100/1000BaseT Routed ports. 4x10/100/1000BaseT Switched ports. Broad set of services, including DHCP client and server, DNS client, NTP client, FTP/TFTP client, NAT, CDP, AAA RADIUS and more. Extensive control, monitoring and statistics via M&C Ethernet and serial Ports. GRE tagging and tunneling.





Advantech
Wireless

Microwave Solutions



Higher availability &
longer links

Transcend™ Series - High network efficiency



Transcend™ 1000

Transcend™ 1000 is Advantech Wireless 3rd generation of native IP radio. T-1000 is carrier grade MW radio which performs with many patented technologies. It has lowest TCP/IP latency on the market as well as capability to perform advanced Header and Payload compression. Radio supports Synchronous Ethernet according to ITU-T G.8261 as well as IEEE 1588v2.

Transcend™ 1000's built-in True XPIC™ digital signal processor doubles available capacity by supporting two carriers with vertical and horizontal polarizations on the same frequency. The channel re-use capability provides the greatest capacity possible within any given available bandwidth.

Transcend™ 1000 in hybrid configuration includes optional support for native transmission for up to 2 x STM-1/OC-3 and 16 x E1/T1s. Transcend™ 1000 is the high capacity, high performance, and flexible solution for carrier grade IP and TDM microwave radio market.

- Over 500 Mbps max modem uncompressed throughput
- Two modems in single IDU
- Supported modulation up to 1024QAM
- Quality and reliability as result of very high MTBF
- Native IP, TDM and video traffic
- Errorless ACM
- Advanced QoS functions
- Advanced LDPC/BCH (DVB-S2X) coding
- Diversified interfaces

- High system availability as result of high system gain and high dispersive fade margin
- Full redundancy with hitless switching
- Reduction in space and power consumption
- Gigabit Advanced Switch built in
- Traffic aggregation
- Full XPIC capabilities
- Minimal latency added
- In-band and out-of-band remote management

Applications:

- Backbone transport for mobile service providers and carriers
- Interconnections for public safety and industry
- Wide area network (WAN) connectivity for enterprises and Internet Service Providers (ISP)

Configurations:

- Radio terminal
- Radio repeater
- Multidirectional radio node



Transcend™ 1000

Transcend™ Series - High network efficiency



Transcend™ 800

The Transcend™ 800 carries natively video, IP and TDM traffic. The alternative — encapsulating video & TDM traffic — can have negative system and performance implications. Transcend™ 800 is the most affordable high capacity, high performance and flexible solution to demanding transmission, telecom and broadcast applications including backhauling 3G/4G traffic and Wireless Broadband Networks such as LTE, HSPA+, WiMAX, Metro WiFi, UMTS TDD and private communication networks carrying data, voice and HD video. It is available in a split-mount version and all-indoor configurations.



Transcend™ 800

Transcend™ 800 B

Seamless transition between native video and native IP transmission.

Optimized for Broadcast video applications

- DVB-ASI integrated within the platform
- Connects directly with broadcast equipment
- Option to carry 10 MHz clock and has 1pps sync
- MPEG data can be transmitted without encapsulation as native traffic
- Built in GPS
- With the built-in 10MHz clock, broadcast network can carry a high stability Stratum 2 clock to each site
- Full replacement for costly GPS equipment.
- Up to 8xASI interface full duplex
- Simultaneous native IP and TDM traffic
- 214 Mbps per ASI max with 188-byte & 204-byte packets



Transcend™ 800 B

Transcend™ Series - High network efficiency



Transcend™ VP

Innovative, cost-effective and reliable are some of the words describing the Transcend™ VP microwave radio link product line. VP stands for Value Proposition – designed and built to meet market expectations on cost and reliability.

It is software adjustable from 2 x E1/T1 to 16 x E1/T1 with simultaneous Ethernet traffic. With key benefits such as cost-effective and reliable design thinking, the product is addressing high volume customers looking for a valuable solution, such as Internet service providers, Telecom operators and other companies within the tele- and data communications businesses.

AMR Transcend™ VP microwave radio link family addresses fixed wireless applications requiring traffic throughput from 2 x E1/T1 to 16 x E1/T1. Transcend™ VP supports simultaneous Ethernet and TDM traffic giving advantages in networking for multi-usage connections/networks. The Ethernet capacity can be flexibly assigned from 4 to 36 Mbps and supports port to port VLANs.

Two, new generation, HSSDC-2 connectors for redundancy and daisy chaining with optional TDM traffic aggregation and connections with multiple radios from AMR Transcend™ family are available on the front panel. These connections are allowing AMR Transcend™ VP to be part of Allgon Microwave powerful nodal solution with software controlled cross connection and radios whose capacities can be adjusted to current needs in the network. The AMR Transcend™ VP Radio management system is built upon open standards with Embedded Element Manager (Web interface, Telnet) and SNMP.



Transcend™ VP

Transcend™ Series - High network efficiency



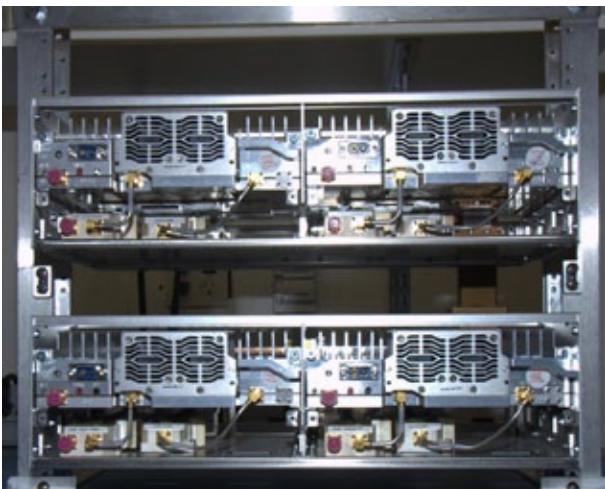
Standard Outdoor RF Unit and All Indoor RFU

RFU Applications

- All-Indoor mw radio solution
- Long haul SONET and/or IP/Ethernet microwave transport
- High capacity backbone routes
- Trunking networks
- Public safety, utility, private network and enterprise

Common ODU for all transcend radios

- Compact & lightweight
- Extremely easy replacement of ODU
- Polarization changed by simple rotation of RFU
- Compliant to ETSI environment standard ETS 300 019-1-4
- Standard ODU type for all radios opens easy and seamless path to future system expansion
- Over 70 years MTBF based on field return data



Indoor microwave RF unit



Common outdoor unit (ODU) for microwave radios

NetWay Manager™ - Quality in network operations

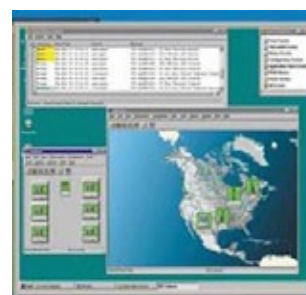


NetWay Manager™

The NetWay Manager™ software is the generic network management platform for Advantech Wireless Microwave products. The Workgroup edition is optimized for small to medium-sized networks and operates in a single user environment. In the same time, Enterprise edition of NetWay Manager™ is customized for big-sized networks and operates in multiple users environment

NetWay Manager™ is designed to centrally monitor and manage critical network interconnected devices. The system keeps track of the equipment status in real time and ensures the quality of network operations. Time, software and other critical parameters are easily synchronized through a complete network.

The software can act as a feeding node to upper layer Network Management Systems (so called Umbrella NMS).



Netway Manager™

Features

- Network status in real time
- Based on open standards
- Easy integration with third party SNMP-based elements
- User friendly interfaces
- Scalable
- Robust
- Proven with Advantech Wireless products since 2001

NetWay Manager™ - Quality in network operations



Fault Management

Used to instantly display and log events with their severity, date, time, IP address, event description and event number. This event log can be exported to a database or to a file available to third party applications. Event filters can be configured for alarms and can forward alarms to a higher order system.

Performance Management

It is possible to either collect the performance log stored in the NE or to run real-time performance collection towards NEs.

Viewing MIB Graphs

Real time graphs can be plotted for all parameters and performance data can be exported to third party applications.

Configuration Management

In NWM it is possible to configure the NEs using either an SNMP based toolbar, by launching the user-friendly web based Embedded Element Manager or using a Telnet connection.

Security Management

NWM can have users at five different access levels with different user capabilities.

Map Database

All topology and network node attributes can be accessed at the server Computer and remotely. The map database is created by discovery process. Objects can also be added and rearrange.

Submap Views

In a graphical submap all Network Elements (NE) can be positioned on real imported maps and be organized in hierarchies.

Trend Report

As NWM polls for long term statistics for each polled variable. NWM can automatically generate Baseline Alarms when variable values exceed the set baseline.

Audible Alarm

For events, NWM can generate a sound (bell) or a Sound Wave File (.wav) at all logged in consoles when the event occurs.

Email/Pager Notification

NWM users can be associated by user group names for the purpose of sending events to email account or to a pager.

Configuration Backup

Used to create a reflection of the configuration in a network element and to restore the configuration when needed.



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At Advantech Wireless we provide industry-leading innovations in advanced end-to-end satellite communication technologies. Our commitment is to help our customers achieve best performance and maximize ROI by providing complete customized turnkey solutions. We design, manufacture and deploy networking solutions for broadband connectivity, broadcast solutions and backhaul requirements using satellite and terrestrial wireless communications.

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