



**Advantech
Wireless**

SMARTER SOLUTIONS,
GLOBAL REACH.



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™ 900

High Performance – Cost effective – All Outdoor Microwave Radio

Transcend™ 900 is a simple and versatile wireless point-to-point IP backhaul solution. This radio is available in selected licensed and unlicensed frequency bands between 6 GHz and 24 GHz (including the 5.8, 17 and 24 GHz unlicensed bands). The T-900 is designed to meet service providers' stringent requirements for a high capacity, low cost of ownership carrier-grade backhaul solution.

Transcend™ 900 provides up to 900 Mbps Full Duplex throughput with low latency. The capacity and channel bandwidth are software adjustable between 3.5 and 112 MHz with hitless adaptive modulation from QPSK to 1024 QAM.

This product is future-proof, as user can provision the traffic capacity based on priority, or dynamically (adaptively), change it to provide the best throughput through the system. This can be according to CoS priorities, or QoS for VoIP traffic.

In addition, Advantech Wireless Transcend™ 900 has advanced Adaptive Coding and Modulation. Radio coding and modulation is dynamically and seamlessly adapted to the path propagation conditions. The end results are increased network availability with decreased antenna sizes. The ACM is perfectly suited for Ethernet IP backbones, where instantaneous capacity can be traded for sustained availability during fading conditions. The built-in traffic priority ensures safe delivery of information together with low latency and a minimum packet loss in transmission.



Transcend™ Series - High network efficiency



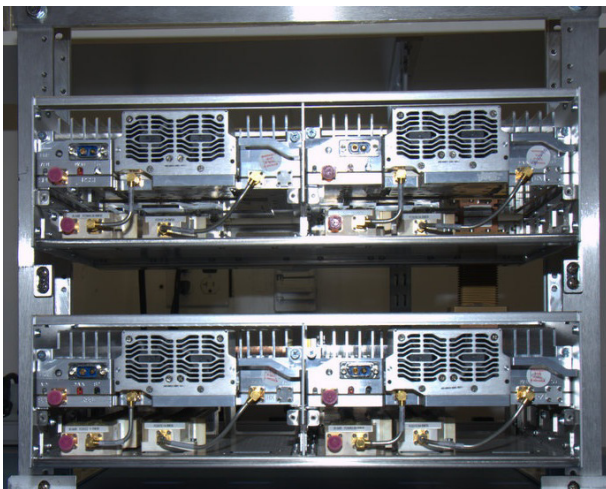
Standard Outdoor RF Unit and All Indoor RFU

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

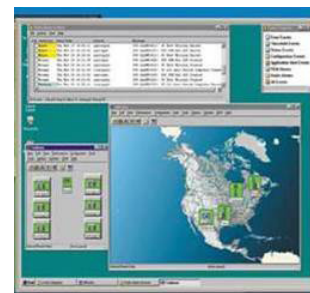
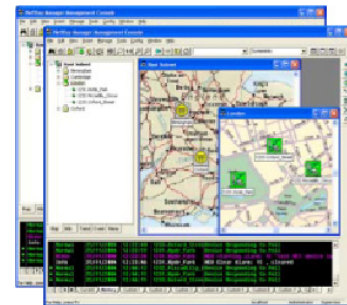


NetWay Manager™

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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Advantech
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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.

www.AdvantechWireless.com