



NEWSLETTER

Advantech
wireless broadband culture

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Versatile solution for DVB-T/H content distribution

It's probably no news to you that DVB-T and DVB-H networks are currently popping up like mushrooms. And the market is not yet showing signs of slowing down: on the contrary.

It is also commonly accepted that the only efficient Primary Distribution of the various multiplexes should be done over satellite: hence, all remote areas are covered, next to supra-national or territorial coverage. Satellite also means the operator is not dependent on terrestrial infrastructures which are often beyond its control.

In order to maximize the bandwidth efficiency (satellite OPEX costs), a few technologies have been developed to combine (concentrate) several muxes into one carrier. Compared to some proprietary solutions, such as used in France, the versatility of the DVB-S2 standard offers the ideal tool to this end: multiple streams can be combined into a unique modulation for all muxes (CCM-MS). Alternatively, a different Modulation and Coding scheme (ModCod) can be assigned to each of these Multiplexes (VCM). A third mode is the ability to continuously adapt the modulation scheme according to the reception quality (ES/No value), thus guaranteeing a satellite link under all weather conditions. This is known as ACM.

Hence, Advantech is offering a unique solution for the reception of these signals, accepting both the proprietary solution and the DVB-S2 CCM-MultiStream modes (next to VCM and ACM, of course). The main advantages are obvious: the marketplace today offers a 2-box solution, which we can now offer as a single 1RU integrated solution.

It not only solves the migration problem from the proprietary solution to the commonly accepted DVB-S2 solution, but is a lot more cost-effective, saves space and avoids the need for different M&C software platforms.

Furthermore, the unit has up to 4 ASI outputs, simultaneously restoring the different Multiplexes at the uplink in a fully transparent way (suitable for Single Frequency Network), and optional IP outputs.

As transmission towers are often unmanned, the unit is also available without front panel, reducing further the cost. The M&C is done via the SNMP agent (with MIB file), or via the web interface (GUI), or via the serial port.

And that is not all. The product can be configured with DUAL demodulators, completely independent, but in a single 1RU chassis

This compact solution can be used for reception of either two different frequencies, or for redundancy purposes. In the latter case, integrated output switches can be provided.

Optional features, such as Physical Layer descrambling, BISS descrambling and graphical spectrum analyzer can be added by simple on-site password upgrade. Amongst others, Arqiva just adopted this modulator & demodulator solution for distribution across the UK...

Arqiva goes with Advantech for DVB-T content distribution

Amongst stiff competition, Arqiva, a leading European broadcast operator, awarded the contract for Primary content distribution to Advantech. This decision was based on the product performance and technical compliance of the DVB-S2 equipment now being deployed. The further deliveries will cover the total of Great Britain by 2012.

Peter Heslop, DSO Programme Director at Arqiva stated that "The technical proposal and our subsequent testing of the equipment proved to us that Advantech represented the best solution for this project".

This is one more proof of Advantech's leadership and forward vision when DVB-S2 equipment is involved..

Advantech Wins US\$14 Million Contract

Advantech Wireless Broadband has been awarded a multimillion contract from a leading Latin American Telco Service provider to supply VSAT satellite telecommunication equipment and services.

For the initial phase of the program the value of the contract is in excess of US \$14M, with potential additional deliverables of over US\$23M. This will bring the total amount of the contract value to more than US\$37M.

This state-of-the-art telecommunication system will include a fully integrated redundant hub and 3,200 Very Small Aperture Terminals (VSAT).

Services will include internet, voice, video, data, videoconferencing and television.

Earlier this year, Advantech Wireless Broadband solidified its prominent position in the Latin American Market by delivering a fully redundant satellite gateway to the military sector in Colombia, including the radio frequency subsystem along with hundreds of remote VSAT stations and all country-wide deployment services for a contract value of US\$2.1M with potential additional deliverables as to bring the contract value in the tens of millions of US dollars. With these two major customers in Latin America, Advantech Wireless Broadband has all the reasons to be optimistic about several .../...

other pending opportunities in this important market. As such, Advantech is now working to secure a multimillion dollar contract with another emergency first response governmental agency in the region.

Commenting on the significant contract award and other opportunities realized in Latin America, David Geleman, the founder and Chief Executive Officer of Advantech Wireless Broadband said:

"We are delighted to have been awarded the latest important contract from this prominent Latin American telecommunications company. The latest contract award provides further evidence that Advantech Wireless Broadband delivers world-class broadband satellite communications. This award will secure high caliber positions and present opportunity for further employment in Quebec and elsewhere in Canada for the coming five years."

Advantech DVB-RCS platform WorldWide

Advantech being one of the main pioneers in the standardization of the DVB-RCS standard for many years, the fruits are now yielded all over the market place.

Not only have VSAT become more popular for both military and civil use. Also corporate networks are becoming aware of the efficiency and low operation cost of a VSAT network to cover all their affiliates or customer distribution points.

One good example is the supervision of the huge number of transmission tower networks for TV, Radio, GSM, digital signage, etc. If a network operator wants to fulfill its commitments towards its customer, he needs to be able to control and to monitor simultaneously all transmission points at a glance. He also needs to have full control of remote redundancy switching, uploading of new Software, switching from main programs to local or regional programs, etc.)

As terrestrial links (fiber, microwaves ,etc) are not always available to remote sites, here again, the satellite is offering the most flexible solution.

Advantech has already deployed more than 150 hubs, representing over 40.000 terminals, Compared to other suppliers, Advantech has the benefit of having a fully scalable hub, thus avoiding an important front -end investment when deploying the network.

Another differentiation is the use of ACM for optimal and guaranteed link availability.

The cost-effective terminal is 100% IP -based, while the 19" 1RU professional version can be fitted with ASI outputs as well.

But the biggest eyecatcher for our customers is probably the ability to operate the Advantech VSAT platform in either DVB-S2 MF-TDMA mode (star networks) or in

SCPC mode (Mesh and/or star networks), thus reducing the delay as no central hub is required when operating in this mode (w/o automatic scheduling)

New Advantech Product releases in a nutshell:

- S 5420: A revolutionary TDMA + SCPC modem

Just imagine a traditional DVB-S2 SCPC modem for peer-to-peer communications with the usual LDPC-FEC's, 8PSK-16APSK, ASI + IP interfaces etc, which is also able to work in MF-TDMA mode as part of a DVB-RCS network. Add to this the AACM capability to automatically and dynamically switch between those two modes according to your specific traffic and applications needs. This results in the most cost-effective solution which beats all competition.

- 8/16 Watt and 60 Watt Ku-band BUC's

As pioneer and world leader of SSPA's, Advantech released a new lightweight BUC (an SSPA with integrated block frequency converter having an L-band input), just weighting 5 lbs. (2.3 kg)

Next to this one, Advantech is now also delivering a 60-Watt BUC, having the same lightweight concept and high reliability as known for all other HPA's manufactured by Advantech.

Small antennas with even smaller satellite costs

We have recently upgraded our lpoint antenna controller to include the capability to track inclined orbit satellites, giving access to lower space segment costs. This option is available on our vehicle-mount and fly-away satellite antenna solutions plus the recently announced Monitor product, a drop-in replacement mount for existing fixed VSAT antennas.

More information and data sheets on all these new products can be found on our website www.advantechwireless.com

Company moves:

Advantech is pleased to announce that Arnaud Barthelemy has joined us in June as Vice President of Business and Product Development.

With his long-standing satellite market experience, he will contribute in further developing the Advantech business market share. Arnaud will also be closely involved in the further development of Products for specific markets and applications.

Arnaud joined us after spending 14 years in key executive positions with Newtec Productions and we warmly welcome him amongst our family.

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