

Cable AML News

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NEW 28 GHZ SYSTEM DELIVERS DIGITAL TV AND HIGH SPEED DATA

Cable AML has delivered two TRX28-130 base station transceivers and two OAR28-001 broadband outdoor repeaters to Terminales de Telecomunicaciones Terrestres in Spain. The high-powered gear will be used in a new network that will begin operations in Lisbon, Portugal

and gradually spread throughout the country.

The advanced broadband network uses the Digital Video Broadcast-Terrestrial (DVB-T) encoding standard to deliver multi-channel video and next-generation Internet, inter-

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NEWS GATHERING SYSTEM FOR MOBILE STUDIO TO TRANSMITTER LINK



Omni-directional Receive antenna for mobile STL Link.

A new, transportable, TV Studio to Transmitter wireless system has been designed and deployed in Mexico to feed a MMDS transmitter with local news feeds from mobile cameras located within 5 miles (8 kilometers) of the MMDS transmitter system.

The FM system, which operates in the 5.8 GHz band, an unlicensed band in the United States and many other countries, provides operators with a low-cost solution for local newsgathering in small communities.

The system consists of a portable transmitter with an integrated



Multimedia 28 GHz Base Station Transceiver installed in Lisbon (Portugal)

flat panel antenna and a receiver with an omni-directional receive antenna. This allows reception of signals from all points around the transmitter without re-orienting the receive antenna.

The output of the receiver can be fed directly to the MMDS system.

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CABLE AML INSTALLS MMDS SYSTEMS IN MEXICO

Cable AML has successfully installed and turned on services for two new broadband MMDS systems in the Mexican state of Zacatecas.

The systems, which include integrated headends, provide multichannel pay TV service to two medium-size towns with limited or no multichannel TV service.

The system in the town of Jerez uses a 250-watt broadband transmitter and an omni directional antenna to provide 31 channels of analog video to

a distance of 10 kilometers. Cable AML assisted in the installation of the system and provided on-site installer training.

The system in the neighboring town of Fresnillo includes a more powerful 500-watt transmitter. The coverage range for the same channel loading is 15 kilometers. ✦



Armando Carrillo shows 250-Watt MMDS Transmitter integrated with compact headend.



First subscriber antenna goes up at Jerez (Zacatecas, Mexico)



Installation crew in Fresnillo (Zacatecas, Mexico) with 500 Watt MMDS transmitter.

STX Link from page 1

This enables low cost portable links for local news generation and transmission.



Transmitter for news gathering link uses compact planar antenna for ease of installation, pointing.



Customer training on integrated MMDS systems at our factory in Torrance, CA.

12 GHZ LOW COST LNB FOR TERRESTRIAL TV

Cable AML has introduced a subscriber premises LNB for terrestrial direct-to-home digital TV systems. The device, which integrates a low noise block down converter and a planar antenna, is suitable for DTH (direct to home) digital TV applications in the 11.7-12.2 GHz band.

The new unit provides systems operators with a low cost method of receiving QPSK-modulated digital TV programs. It is designed to work very much as a DTH satellite receiver. The output of the LNB is fed by a cable to an indoor set-top box that demodulates the signals and feeds the subscriber TV set. ✦



Outdoor LNB features integrated flat panel antenna.

INTEGRATED LOW-COST 52-CHANNEL HEADEND

Cable AML has designed, specified, tested and delivered an integrated low-cost, 52-channel Headend designed to feed a state-of-the-art hybrid fiber coaxial cable system in Asuncion, Paraguay.

The system incorporates tunable and fixed modulators and channelized encoders with two-way capability. Included in the package are integrated fiber transmitters with return capabilities to drive several nodes.



Integrated headend is tested by Cable AML engineers prior to shipping.

The system is also designed to provide inputs to coaxial cable distribution gear for the immediate vicinity and broadband AML wireless links to remote areas where laying fiber is not cost effective. ✦

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active TV services, telephony and residential video conferencing.

The second-generation base station utilizes high power Traveling Wave Tube (TWT) technology, which is widely used in satellites



Two-way 28 GHz repeater mounted on top of existing tower for satellite receivers.

because of its reliability and high efficiency. Low-cost repeaters extend the range of the base station, enabling the near non-line-of-sight (NLOS) network to reach as much as 90 percent of potential urban customers at an economically viable cost.

The broadband high power Base Station Transceiver accepts 14 digitally modulated carriers. Each has a data rate of 30 Mbps for a total downstream capability exceeding 500 Mbps.

The hardware incorporates several enhancements, including Global Positioning Satellite (GPS) frequency-locking capability for remote synchronization. This is a requirement imposed by the Orthogonal Frequency Division Multiplexing (OFDM) modulation used by the digital TV carriers in the system.

The two-way solid-state repeaters do not require expensive re-generation equipment. A flexible design allows the input and output sections of the receivers to be mounted at varying distances from each other. This means that they can be located

on ordinary rooftops without the need for elaborate towers or structures. ✦



28 GHz high-power Base Station Transceiver integrated with 180-degree sector antenna.

CABLE AML RECEIVES FCC CERTIFICATION FOR OUTDOOR MMDS TRANSMITTER

Cable AML announced today that it has received FCC certification for its model OTX02-250. This is the highest-power, outdoor, broadband transmitter available in the 2.5 - 2.7 GHz MMDS band.

The OTX02-250 is a solid-state, broadband transmitter incorporating advanced linearization techniques for exceptionally high performance. It is designed to transmit from one to 31 analog television channels or 150 digital channels (using 64 QAM modulation) over distances of more than 30 kilometers, depending on antenna selec-

tion.

The unit is ruggedly built for outdoor operation in a variable temperature environment. It is designed for mounting near the antenna to minimize waveguide losses.

The OTX02-250 features a compact modular design. It is packaged in a robust, weatherproof enclosure, allows easy to use output signal monitoring with either a field strength meter or a TV monitor, and accepts either analog or digital video or data carriers in any modulation format.

What Our Customers Are Saying...

Sirius Broadband (BD) Limited is an MMDS system operator providing multichannel video and high-speed Internet Service to more than 3000 customers in and around Dhaka, Bangladesh.

The system, which started operation in August of 2002, uses Cable AML's IRX02-250C base station transceiver for both video and data transmission. Ziaur Rahman, the

Company's Chairman, is planning an expansion of the system to cover the cities of Chittagong and Sylhet. "Your transmitter is running flawlessly," he said. With the video service offering crystal-clear pictures and the Internet access service providing excellent high-speed connectivity, the system is poised to continue growing at a high rate for the foreseeable future. ✦

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