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EASYLINK

Next Generation Wireless Communication Link

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communications engineering

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All the information included in this datasheet
may be changed without advise.

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communications engineering

EASYLINK SYSTEM BENEFITS

EASYLINK APPLICATIONS

- ◆ Cost effective alternative to conventional radio solutions
- ◆ Embedded video, audio and data, simplify installation and operation
- ◆ Strong Forward Error Correction (FEC)
- ◆ Easy to deploy and to align
- ◆ Easy to install, on a tripod or on a pole
- ◆ User friendly management tool application
- ◆ High gain integrated antenna
- ◆ Ideal to combine with Temix's EasyFLYSAT, to transmit audio/video and IP data via satellite
- ◆ Totally autonomous, together with its optional trolley bag, completed with battery pack and AC charger.

Due to its superior radio performances, to its easy-carrying, installation and managing, EasyLINK ideal applications include:

- ◆ ENG-IP TV Broadcasting, with Full Duplex two-way communication
- ◆ Emergency Telecommunications Networks Recovery
- ◆ High performance video security.



EasyLINK idea arises from gathering the current convergence towards IP technology, as well as the incoming of WiMAX technology.

In this scenarios EasyLINK has been designed and developed to meet the needs for temporary transmission of audio/video and IP-data signals using a single, compact and highly integrated device, easy to carry, to install and to manage.

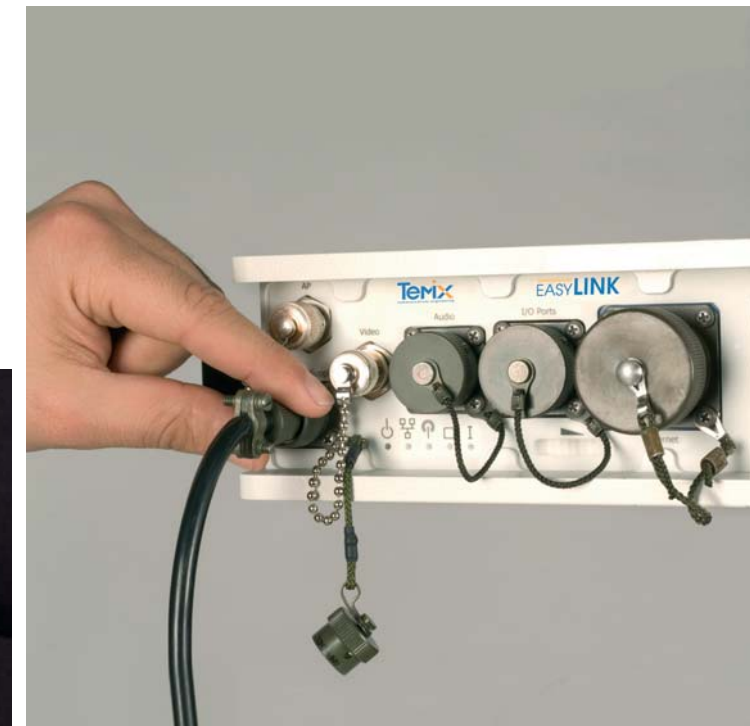
The result is a very flexible full digital solution, extremely performant, useful for fixed, nomadic and mobile applications, able to satisfy a large amount of requirements, also thanks to its ability in trasporting various kind of analogue and digital signals on the same wireless digital link.



How EasyLINK meets customer's needs

In order to satisfy many needs, the EasyLINK can be equipped with different technologies. This is true for the radio interface, as well as for the data interface.

Regarding the radio interface, EasyLINK can use WiMAX, or SHF - PDH technologies, whose features and benefits - to be added to the previous ones - are examined in the following pages.



WiMAX benefits

- ◆ Latest OFDM technology, that improves radio performances, enabling LOS and NLOS link conditions;
- ◆ Suited to both fixed and mobile applications;
- ◆ High coverage, up to 50 Kms (@ 3.5 GHz) or 20 Kms (@ 5 GHz);
- ◆ Adaptive Modulation, ATPC and Forward Error Correction (FEC) features, that optimize performances in urban noisy environment;
- ◆ Easy to align, thanks to SNR leds bar display;
- ◆ Full-duplex two way communication with TDD or FDD technology;
- ◆ High rate capacity, up to 100MBit/s;
- ◆ Point-to-point and Point-to-multipoint configuration;
- ◆ Frequency range: licensed 3.5 GHz or unlicensed 5 GHz;
- ◆ Ideal Application: IP services.

EasyLINK WiMAX

The WiMAX EasyLINK adopts the superior OFDM radio technology in 3.5 GHz licensed bands or in 5 GHz unlicensed bands, to overcome the need of Line Of Sight (LOS) links. In this way, the link can work also in NLOS, getting over the multipath effect, typical in urban environments.

It employs advanced features, including Automatic Transmit Power Control, Forward Error Correction, Adaptive Modulation Algorithm.

Furthermore, EasyLINK with WiMAX technology can work in point-to-point configuration as well as in point-to-multipoint configuration, with IP Full Duplex two ways communication.

Standard Interfaces:
Power Supply, Ethernet Port, analog/digital Video and Audio;
Optional interfaces: 802.11b/g AP antenna port, RS232/485 ports.

EasyLINK SHF - PDH

The SHF - PDH technology is the ideal solution when the need is to transmit a large amount of IP data in LOS conditions.

It establishes a Full Duplex two-way communication, in SHF licensed bands, and includes advanced features (a strong Forward Error Correction algorithm, Automatic Transmit Power Control, the Adaptive Modulation algorithm, an excellent interference rejection and frequency stability) that make it suitable for high-capacity video over IP and IP data services up to 100Mbit/s, as from IP private networks to WiMAX backhauling.

Standard interfaces:
Power Supply, Ethernet Port, analog/digital video and audio;
Optional interface:
802.11b/g AP antenna port.

SHF - PDH benefits

- ◆ Point-to-point configuration, Full Duplex LOS links;
- ◆ High rate capacity: up to 100MBit/s Ethernet traffic, or 4xE1 TDM traffic;
- ◆ Excellent interference rejection;
- ◆ Automatic Transmit Power Control;
- ◆ Adaptive Modulation Algorithm;
- ◆ Strong Forward Error Correction (FEC);
- ◆ Frequency range: licensed, 7, 13, 15, 18, 23, 25 GHz;
- ◆ Ideal Applications: IP services;

EasyLINK video codecs (WiMAX/ SHF - PDH)

In order to meet different needs, the EasyLINK is available in the following several versions:

- ◆ IP-Data;
- ◆ MPEG2 DVB external codec;
- ◆ IP-MPEG4 H264 codec embedded.

GENERAL SPECIFICATIONS

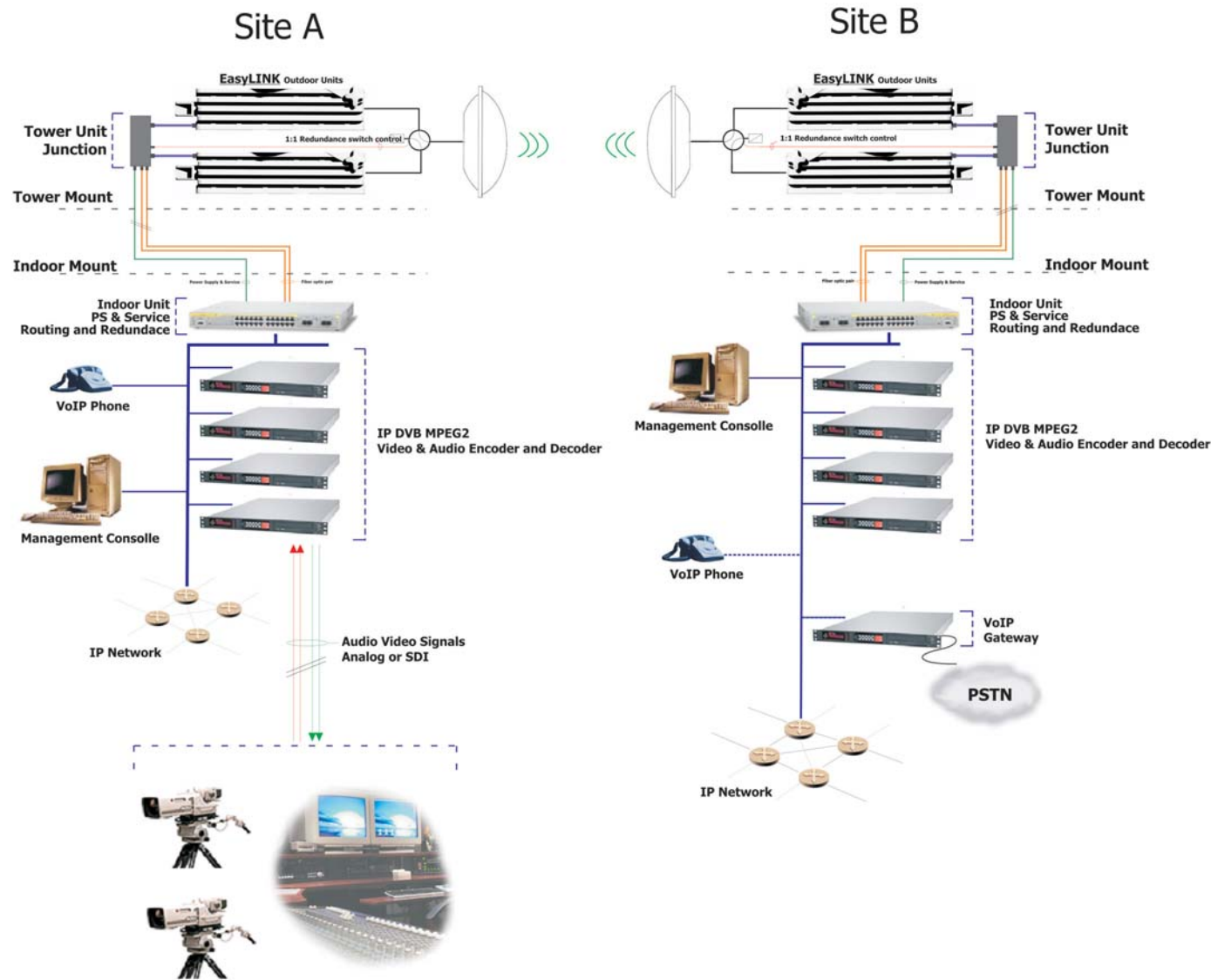
RADIO	Frequency	WiMAX 3.4-3.8GHz Licensed 2.7-4.6-5.4-5.8GHz Unlicensed	SHF-PDH 7-13-15-18-23-25GHz Licensed	SERIA DATA INTERFACE AND I/O	Electrical Level Operating Mode Dry Contact	Port 1 - RS232/485 (max 230 KBit/s) Transparent serial port supporting any asyinc. serial protocol. Input/Output 3 dry contact Inputs (48V AC/DC @ 100mA max)
	Radio Type Channel Bandwidth Center Frequency Resolution Output Power (at antenna port) Modulation Sensitivity Radio Capacity (Air interface)	OFDM - TDD 5, 10, 20MHz 5MHz Up to 36dBm BPSK, QPSK, 16QAM, 64QAM -91dBm @ BPSK Up to 40MBit/s	QAM - FDD 3.5, 7, 14, 28MHz 1MHz Up to 27dBm 4QAM, 8QAM, 16QAM, 32QAM -84,5dBm @ 4QAM Up to 100MBit/s or 4xE1		ELECTRICAL - RU and BU	Power Consumption Input Power Indicators
DATA COMMUNICATION INTERFACE	Standard Compliance VLAN Support Security	IEEE 802.3 CSMA/CD Based on 802.1q Association protocol- SSID WEP 128, AES, IP level filtering 802.11b/g	IEEE 802.3 CSMA/CD Based on 802.1q Not Applicable	MECHANICAL	Stowed Size Weight	367x245x88 mm 4.5 Kg
	Wireless LAN	802.11a/b/g option			ENVIRONMENTAL	Temperature Operational Humidity Sealing Class CE Approvals
EMBEDDED ENCODER	Video Input Compression Resolution Frame Rate Bandwidth Bidirectional Audio Input - Output	1 Composite (PAL or NTSC), 1Vpp/75 ohm or SDI H264 SD over IP Depending by the option installed 1 to 30 fps Configurable between 50 KBit/s to 6MBit/s Input Ch. Micro/Line, Output Ch. Line (Return Ch)				



EASYLINK

Point to Point

Fixed Wireless IP-MPEG2 Full Duplex Video, Audio and IP Service



Point to Multi Point Network

Fixed Wireless IP-MPEG2 or MPEG4 Full Duplex Video, Audio and IP Service

