



# The first camera that's able to send images by satellite around the world..!!

**IT SAT210** is a last generation device system produced by Intellisystem Technologies jointly with Elsacom, which integrates an image camera and the Globalstar satellite transmission system for videosuirveillance and remote monitoring applications.

ITSAT210 transmits MJPEG frames to a data collection centre by using the Globalstar satellite constellation, by this way it is possible to avoid all the limitation of normal infrastructure network, strongly dependent on a local telecommunication base station.

ITSAT210 is a fully customizable device system can be easy adapted to a range of remote control and emergency management applications. The Globalstar satellite system offers the greatest security and reliability providing a robust data link for frame transfer.

Thanks to the powerful web technology software interface it is possible to setup all the functionalities as follows:

• **Passive functionality.** The device system acts as remote terminal with point to point connection. It is possible to connect any time to the ITSAT210 by using a Dial Up connection; a Web interface allows to download the captured frames with customizable resolution and compression factor.

• Active functionality. ITSAT210 is able to send captured frames to a remote control center by email or FTP. The first functionality is appropriate when the system should communicate with just one person. The second one can be used for transmitting images to a remote server in order to be broadcasted within any major user group.

ITSAT210 is composed by two main devices: an image camera device and the Globalstar satellite transmission system.

#### **IMAGE CAMERA DEVICE**

The Image Camera device is a compact and versatile system, easy to transport with built-in powerful high resolution CCD sensor with a MJPEG compression engine system full customizable in terms of compression factor and



#### Features:

- Integrated video server system management
- Easy configuration software with wizard assistance
- Standard lens C/CS-mount type with auto iris DC and Video Drive support
- Size and quality image options for Real-time performance
- One windows Built in Motion Detect in one windows.
- Customisable in terms of: percentage and sensitivity



MOTION DETECT ON CHIP
MJPEG Compressor on Chip

- Developer kit for system integrator
- One relay output extension suitable for remote control application as to drive a PT positioning device or an ON/OFF actuator
- One input digital port extension for external sensor and alarm device
- RJ45 TCP/IP port for browser configuration
- RS 485 serial port for industrial application

#### **Technical specification:**

#### Networking (Only for System Setup):

- Protocol: TCP/IP, HTTP, SMTP, FTP, Telnet, NTP, DNS e DHCP
- Ethernet 10 base T or 100 base T fast Ethernet auto negotiation
- Configurable bandwidth limits
- · User's access restriction by user name and password account
- Demo account with limitation by administrator





## Video:

• MJPEG compression algorithm

• Image size and quality configuration by web software interface

- Colour and BW (black and white) image control
- Time stamp and text overlay



## **Camera Specification:**

- 1/3 inch colour CCD
- 1Lux / F2.0 sensitivity
- ACG, AWB, AES
- Max resolution: 512 (H) X 582 (V) (PAL)
- Electronic shutter: 1/60 ~ 1/100.000 sec (NTSC/PAL)
- Standard resolution for one channel 9,6 kbps Globalstar system:
  - Up to 16 frames/min@ 176 x 144 pixel
  - Up to 8 frames/min @ 352 x 288 pixel
  - Up to 4 frames/min@704 x 576 pixel
- Dimension: 216,7mm(L) × 193,7mm(W) × 44.3mm(H)
- Weight: 700 gr
- Full charge Power dissipation: 5,4 W
- Power supply: 12V DC
- Temperature: 0-50 °C (32-122 °F)
- Humidity: max 95%RH
- Certification: CE; FCC

# SATELLITE DATA TRASMISSION SYSTEM

The Satellite Data Trasmission System, consist of a GSP-1620 module, that delivers reliable digital data communications virtually anywhere in the world using QUALCOMM's patented CDMA technology and the Globalstar constellation of 48 Low-Earth-Orbit (LEO) satellites.



## Features:

- Two modes of call set-up:
  - IP Packet Data over PPP
  - Asynchronous Circuit Switched Data
- 9.6 kbps Full Duplex service rate
- Authentication/Encryption

## **Technical specifications:**

Operating Frequencies	Transmit 1610 - 1625 Mhz TReceive 2484 – 2499
Maximum Transmit Power	+26 dBm EIRP (0.4 W)
DC Input Voltage	+5.2 V to +16 V (DC)
User port interface	DB25 serial RS-232, with pin- outs for data, control and power supply
Modem-antenna connectors	TX: MCX female RX: MCX female
Antenna connectors	TX: SMA female RX: SMA female
Modem dimensions (OEM)	90 x 75 x 17 mm (7.48 x 2,95 x 0.68 in.)
Antenna dimensions	Diameter: 103 mm – Height: 63 mm
Antenna weight	Less than 250 gr
Antenna cables (not included)	TX and RX; SMA male – MCX male
Modem environmental conditions	Operating: -30 °C to +60 °C Storage: -40 °C to +85 °C
Antenna environmental conditions	Operating: -40 °C to +85 °C Relative humidity: 5% to 100%

# ITSAT210 base configuration:

- Camera system with 6mm standard lens
- Qualcomm GSP-1620-SP (boxed)
- Power supply 220 V AC; 12 V DC
- Data/power supply cable: DB25 serial RS-232, 10 m lenght
- Antenna cables (Tx-Rx): SMA male, MCX male, 4 m lenght

In collaboration with...





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