SATELLITE COMMUNICATION SYSTEM TYPE

TSAT 2100

GENERAL CHARACTERISTICS

The ultra small bi-directional satellite communication system TSAT 2100 is designed specifically for low data rate communication in the Ku-band.

Operating at data rates between 2 400 - 9 600 bps (also up to 16 800 bps) TSAT 2100 provides a highly reliable and cost effective solution to data communication for a wide array of applications.

The network runs on such a narrow bandwidth and low output power that the cost of space segment is almost negligible in the overall network expenditure. For example, a 9600 bps TSAT network will utilize only 22KHz of equivalent bandwidth. Such low consumption of satellite transponder capacity makes TSAT 2100 unique in the VSAT market.

Flexible interface and protocol options make the TSAT 2100 network an ideal communications medium for a variety of applications such as :
- Collection and distribution of data in SCADA applications, - Transaction such as POS (Point Of Sales), ATM (Automatic Teller Machines), betting and lottery,
- Broadcast of data

MAIN FEATURES

- **Low Data Rates 2400 - 9600 (16.800)bps**
- **Dedicated Hub with full control of the network**
- **Cost effective rent of narrow space segment**
- **Small VSAT antenna that reduces manufacturing, shipment and installation cost**
- **Network Management on a PC**

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CERTIFIED IQNet QUALITY SYSTEM UNE-EN ISO 9001

DIMAT

TECHNICAL SPECIFICATIONS

Antenna

Remote	55, 90, 120 cm
Hub	120 (180, 240) cm

Frequency

Transmit	14.0 -14.25 GHz
Receive	12.50 - 12.75 GHz (other under request)

Modulation and Data rates

2-4PSK	2400, 4800 bps
OQPSK	9600 bps, 14400 (FEC 3/4), 16800 (FEC 7/8)

Access Methods

Outbound	TDM
Inbound	TDMA, Slotted, Aloha, user access, schemes

Interface

RS232, RS422, RS485

Remote	2 async. DB9 1 sync. DB25, X25 (under request)
Hub	Up to 64 async. DB25 1 sync. DB25, X25 (under request)

Communication protocols

Compatible with IP/ethernet

Circuit-switched	Point-point, Multidrop, PSTN modem, dial-up emulation
Packet-switched	X25 SVC, PVC (under request)

Mounting

Antenna	Wall or 3 inch pole
Main Unit	Indoor unit, Outdoor cabinet, pole mount option

Weight and dimensions

Antenna	55 cm	5.2 kg
	90 cm	9.4 kg
	120 cm	19.6 kg
RF-Front End	Ø 105 x 172 mm	2.1 kg
Main Unit	324 x 257 x 69 mm	2.5 kg
Power Consumption	20-35 W (enables solar cell operation)	

OPTIONS

Voice Capability
Outdoor configuration
Multiple inbound links