

TT-3022C. Features and Characteristics

Picture(s)	Features and Characteristics
	<i>The compact TT-3022C LandMobile Capsat Transceiver is your ultimate choice for true global Inmarsat-C mobile communication links offering fast and reliable connections to any worldwide fax and data subscriber and/or directly to and from another Capsat unit.</i> <i>The ruggedized, extreme compact design and power conserving features of the TT-3022C Transceiver, makes it very attractive for use in your Land-Mobile SCADA and trucking applications, ensuring fast and reliable transfer of vital information, i.e. position reporting, data monitoring, messaging, loading and unloading information, route planning etc.</i> <i>The TT-3022C supports all Inmarsat communication modes, including telex X.25 e-mail and mobile to land fax services, the standard PU/PA programming formats, as well as a new advanced "Connection" reporting format with multiple DNID'S, independent reporting timers and global ocean area pre-programming.</i> <i>The TT-3022C includes an advanced Sleep Mode function enabling both timer and event controlled wake up routines reducing the total power consumption of the Transceiver and optional 8-channel GPS receiver to between 30mW and 280 mV depending on the reporting intervals.</i> <i>The TT-3022C Transceiver is supplied with our compact omnidirectional TT-3005B Antenna, integrating both Inmarsat-C and GPS operation into one single unit. The advanced antenna design ensures trouble free operations down to - 15 deg. elevation angles.</i> <i>Operation and control of the TT-3022C is performed via our dedicated and compact TT-3606C Terminal and mobile printer equipment.</i> <i>In addition, the Transceiver also includes a number of parallel control ports, standard NMEA nav/data interface and an advanced ArcNet local network interface for connection to on board sensors, supporting all your interface requirements. The TT-3022C supports our new home base Capsat Manager Program for fleet tracking and fleet management.</i> Features • Full compliance with the latest Inmarsat-C land-mobile specs. ISO 7637 Road Vehicles specs. and CE requirements. • Extreme power conserving, light weight and compact design (car radio size). • 2 way data, fax and e-mail transfer to world wide desti nations. • Data- and position reporting to multiple destinations and time intervals. • Pre-programmmg of DNID s for global coverage. • Programmable sleep modes for power conservation (down to 30 mW total). • Ideal for Truck, SCADA and rural applications. Characteristics General Specifications: Meets or exceeds current and proposed INMARSAT specifications (CN114) and IEC 1097-4/IEC 945 for full SOLAS/GMDSS installations. Maritime GMDSS Antenna: Inmarsat-C/CPS omnidirectional antenna RHC polarised, G/T 23dB/K EIRP 14 dBW at 5° elevation. Coverage +90° to 15°. Other Antennas: Please refer to dedicated leaflets Operating Frequencies: Receive 1525.0-1559.0 MHz, Transmit 1626.5-1660.5 MHz. GPS 1575.42 MHz Channel Spacing: 1.25/2.5/5 kHz. Modulation: 1200 symbols/sec. BPSK Data Rate: 600 bit/sec. Antenna Interface: Standard 50 ohm female TNC (transceiver) female TNC (antenna). Terminal Interface: Serial EIA-232-E 110-38.400 Baud IA-5 code, DB-9F connector. Printer Interface: Standard parallel IEEE 1284 (Centronics), DB-25F connector. Data & GPS I/O: Serial EIA-422-A optically isolated input (NMFA 0183 protocol), DB-15F. Parallel I/O: RS 410 4-bit open collector input/output and 2-bit input. ArcNet Interface: ATA/ANSI 878.1 2.5Mbit token based, twisted pair. Solid-State Storage: 512 kbyte Flash and 256 kbyte SRAM. Optional GPS Module: 8-Channel GPS tamper proof pc-board, 1 sec. update rate, 15m RMS accuracy (100m with S/A), 0.2m RMS velocity accuracy. Power Source: 10-32V floating de 4.8/8 IW Rx/Tx with GPS module. Power Output: floating 9V/400mA dc output for terminal equipment. Sleep-Mode: Timer and event programmable modes total system power consumption 1.14W/ 15min, 570mW/30min, 280mW/1h, 140mW/2h, 60mW/5h, 30mW/10h. Ambient temperature: Electronics Unit, -25°C to 55°C operating, -40°C to 80°C storage. Antenna Unit, -35°C to 55°C operating 40°C to 80°C storage. Solar Radiation: 1200 W/m2 max. flux density. Relative humidity: 95% non condensing at 40°C. Precipitation: Up to 10 cm/hour droplet size 0.5 to 4.5 mm.

Wind: Up to 200 km/h.
Vibration Operational: Random 5-20 Hz, 0.005 g²/Hz, 20-150 Hz -3dB/Oct. (0.5g rms).
Vibration Survival: Random 5-20 Hz 0.05 g²/Hz, 20-150 Hz -3dB/Oct. (1.7g rms).
Shock: Half sine, 20g/11 ms.
Antenna Mounting: Standard 1.5" Tube mounting.
Electronics Unit Mounting: Flange mounting, vertical or horizontal.
Dimension: Electronics Unit HxWxD, 50 mm x 180 mm x 165 mm, Antenna Unit HxD 124 mm x 150 mm.
Weight: Electronics Unit 1.3 kg, Antenna Unit 0.75 kg.

TT-3022C Options

Picture	Description	Price
	antenna TT-3005L*	-
	User's Manual*	\$20

* - standard shipment