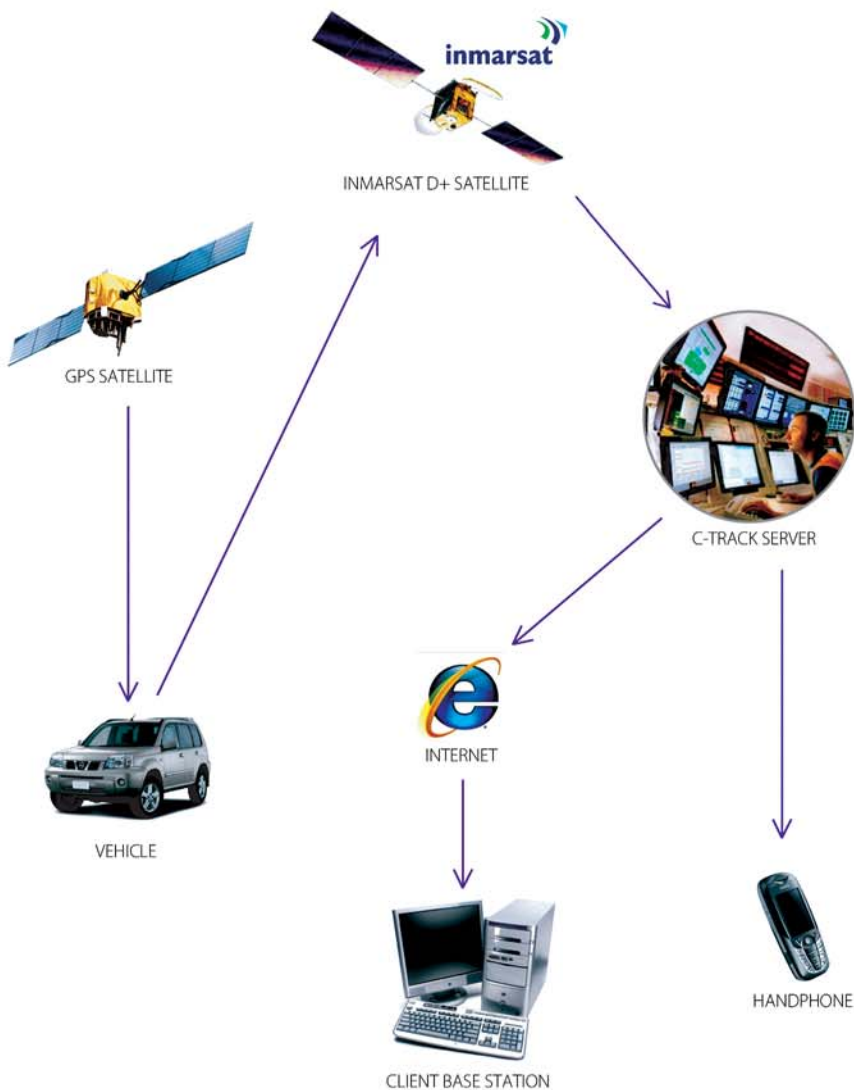


track HYBRID

DUAL COMMUNICATION VIA SATELLITE AND GSM

Several areas does not have sufficient communication facilities such as GSM for SMS and GPRS. For those areas the C-track HYBRID system is the right choice, using our advanced Inmarsat satellite receiver. The receiver is a compact, single unit, low data rate satellite terminal, designed to operate over the Inmarsat satellites using the Inmarsat D+ protocol. In case of GSM reception the C-track HYBRID automatically switches to the GSM SMS/GPRS mode, hereby reducing communication costs.

Additionally, the fleet manager is able to track and trace vehicles and remote assets via Google Earth.



INMARSAT SATELLITE

The Satellite Center connects directly to the D+ Earth Station. Messages received from the ground station are forwarded to the user's C-track Base Station. Polls originating from Base Stations are similarly forwarded by the Satellite Center to the Ground Station for delivery via satellite to the vehicles.



HARDWARE SPECIFICATIONS

PHYSICAL

Dimensions	112mm(diam) x 45.75mm(height) (Does not include mounting threads/extensions)
Weight	350g
Colour	UN0332 (Coconut)
Connector	12 way plug. Bulgin 400 Series Buccaneer compatible

ENVIRONMENTAL

Temperature	-40°C to +70°C
Humidity	≤ 95% @ +40°C
Vibration	5-20Hz: 1.92m2s-3 random noise 20-500Hz: -3dB octave random noise
Shock (survival)	Half sine 6ms, 300ms-2
Ingress Protection Rating	IP66 (when interface connector appropriately mated)

FREQUENCY RANGE

Transmit	1626.5 MHz to 1660.5 MHz
Receive	1525.0 MHz to 1559.0 MHz
GPS	1575.42 ± 1.0 MHz

ELEVATION ANGLE RANGE

0° to 90°

TRANSMITTER

EIRP	0 - 9 dBW
Modulation	2 level FSK, 256Hz tone spacing
Tx burst duration	8s (Global Beam)
User data rate	~10 bits per second (Global beam)
Message length	Up to 84 bits per burst

RECEIVER

G/T	≥ -25dB/K at EL = 30°
Modulation	32-ary FSK, 20Hz tone spacing
User data rate	~9 bits per second
Message length	Up to 1000 bits

GPS

Channels	12
Time To First Fix (Typical)	
Cold start	45s
Hot start	<8s (GPS was off for less than 2 hours)
Accuracy (SA Off)	
Position	(CEP, 2D) 4m (Typical)
Altitude maximum	18000m
Dynamic capability	
Velocity maximum	515m/s
Acceleration	≤ 4g
Maximum update rate	1s

GPS TEST INTERFACE

(not available during normal operation)

Interface	Asynchronous serial RS232
Baud rate	38400 bps
Parity/data bits/stop bits	N,8,1

Specifications subject to change without notice.

PT. Lavinta Buana Sakti is not responsible for the operation or failure of operation of GPS satellites or the availability of GPS satellite signals and GSM network coverage.

Product of:

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