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LAND MOBILE COMMUNICATION PANEL ANTENNA

T650



T650 Land Mobile Communication Panel Antenna uses high accuracy GPS/INS integrated attitude azimuth measurement technology to realize 2-axis precise control. Guarantees the carrier will aim at the satellite accurately in all kinds of conditions, even if the satellite signal was defiladed.

- High accuracy INS and cone scan peak value tracking technology.
- Panel waveguide horn array antenna reflector.
- Excellent dynamic tracking performance.
- Fully independent intellectual property rights.

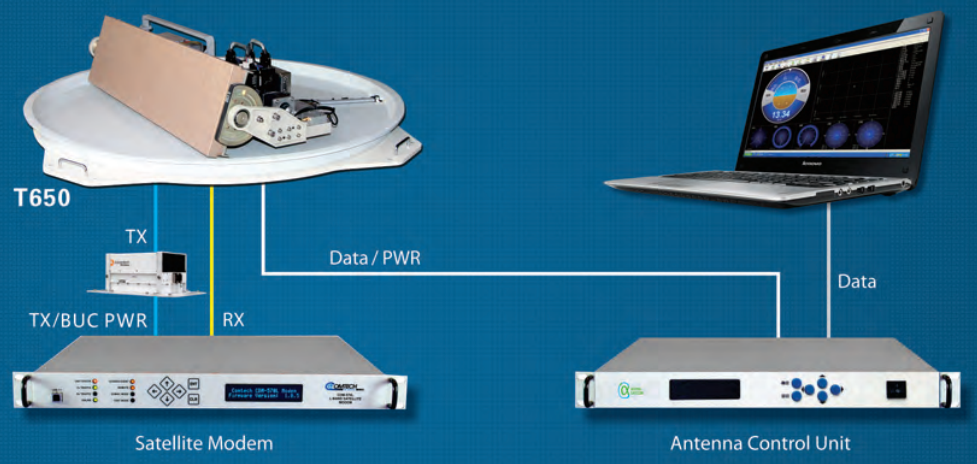
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LAND MOBILE COMMUNICATION PANEL ANTENNA

T650

SYSTEM DIAGRAM



DATA SHEET

Type	T650	T800	T900
Stabilized Type	2-axis		
Dimension (Diameter×Height)	125 ×30cm	131×35cm	142×45cm
Weight	70kg	80kg	100kg
Frequency Range	RxJ12.25~12.75GHz TxJ14.0~14.5GHzË		
Antenna Type	Slab waveguide horn array antenna		
Antenna Gain	Rx:35.5dBi (12.5GHz) Tx:36.5dBi (14.25GHz)	Rx:37.5dBi (12.5GHz) Tx:38.7dBi (14.25GHz)	Rx:38.5dBi (12.5GHz) Tx:39.7dBi (14.25GHz)
Cross-polarization Isolation	＞30dB		
Side-lobe	Conform to ITU-R S.465-6		
Signal Polarization	Linear		
Angular Velocity	Azimuth:150° /s; Elevation:120° /s; Polarization:100° /s		
Angular Acceleration	Azimuth:800° / s²; Elevation:800° / s²; Polarization:600° / s²		
Tracking Accuracy	0.2° RMS		
Azimuth Range	360° continuous		
Elevation Range	0° ~90°		
Polarization Range	360° continuous		
Satellite acquisition Time	＜120s (static) ; ＜180s (dynamic)		
Satellite Re-acquisition Time	Lose less than 30s, instantaneous acquisition; Lose less than 20min, re-acquisition time ＜5s		
INS	Built-in		
Power Input	AC220V 50Hz Typ.200W(not include BUC)		
Operating Temperature Range	-40℃~65℃		

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MARITIME SATELLITE COMMUNICATION ANTENNA

B80



0.8m Ka-BAND

B80 Ka-band Satellite Communication Antenna is designed to accommodate the current and future needs of the maritime market. It works on viasat-1 network for US and Tooway network for Europe. With the superior performance, B80 is an innovation and excellence maritime VSAT antenna system.

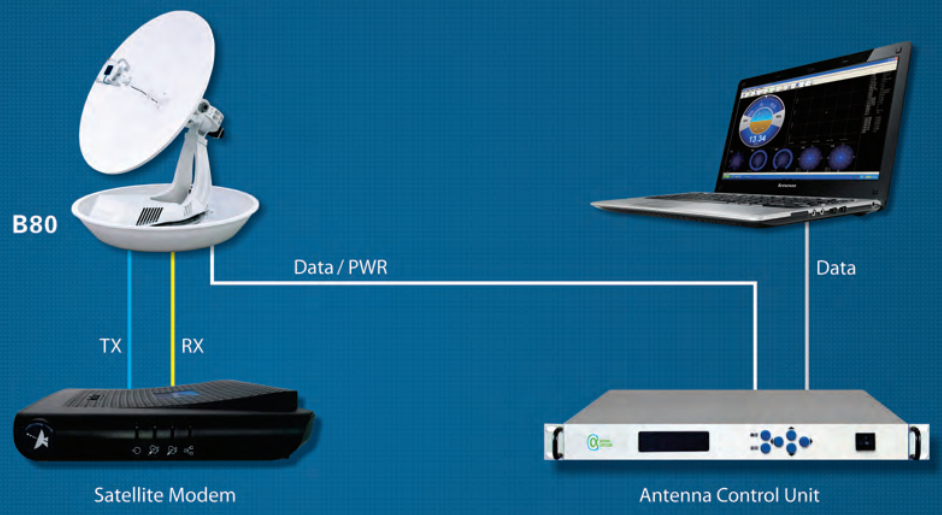
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MARITIME SATELLITE COMMUNICATION ANTENNA

B80

SYSTEM DIAGRAM



DATA SHEET

Dimension (diameter×height)	89 x 100cm
Antenna Weight	42kg

REFLECTOR & FEED SUBSYSTEM

Reflector Size	80cm
BUC Power	5W
RX Frequency	19.7~20.2GHz
TX Frequency	29.5~30.0GHz
RX/TX Polarization	LHCP/RHCP

CONTROL SUBSYSTEM

Tracking Mode	High-accuracy GPS/INS and Conicalscanning
Tracking Accuracy	Azimuth: 100°/s Elevation: 100°/s
Travel Range	Azimuth: 360°Continuous; Elevation: -20°~110°; Cross: -25° ~25°
Stabilized Type	2-axis stabilization, 3-axis tracking

MISCELLANEOUS

Power Supply	24V DC
Power Consumption	60 W
Initial Operating Time	≤100s
Operating Temperature Range	-40° ~65°

ANTENNA CONTROL UNIT (ACU)

Power Input	AC220V 50Hz
Operating Temperature Range	-10° ~ 60°

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MARITIME SATELLITE COMMUNICATION ANTENNA

IP180C



1.8m C-BAND

IP180C Maritime C-band Satellite Communication Antenna is specialized designed for Sino-Ocean. IP180C help the ships to keep broadband communications in the most of waters around the world with 1.8 Meter Large caliber antenna surface. Innovative 3-aix stablility, 4-aix tracking system which guarantee the antenna to point to the Satellite accuratetly even if encounter the big waves. IP180C provide users to communicate with land smoothly under the bad environment.

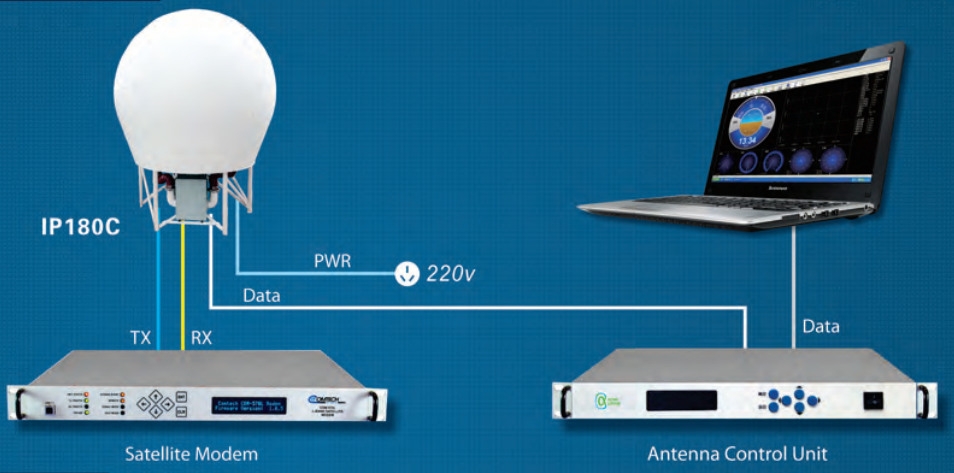
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MARITIME SATELLITE COMMUNICATION ANTENNA

IP180C

SYSTEM DIAGRAM



DATA SHEET

IP 3-axis -C Band





Type	IP180C	IP240C
Stabilized Type	3-axis stabilization, 4-axis tracking, gear drive	
Reflector Size	180cm	240cm
Dimension (diameter×height)	229 ×211cm	320 ×306cm
Antenna Weight	260kg	360kg
Frequency Range	Rx: 3.4-4.2GHz; Tx: 5.85-6.725GHz	
Antenna Type	Ring focus back feed	
Antenna Gain	Rx: 35.6dBi (3.8GHz) Tx: 39.6dBi (6.2875GHz)	Rx: 38.0dBi (3.8GHz) Tx: 41.9dBi (6.2875GHz)
Cross-polarization Isolation	>35dB	
Side-lobe	Conform to ITU-R S.465-6	
Signal Polarization	Linear/Circular	
Tracking Accuracy	0.2° RMS	
Carrier Motion Range	Roll: -30° ~30° , 6s cycle; Pitch: -30° ~30° , 6s cycle; Yaw: 40°	
Angular Velocity	Azimuth: 100° /s²; Elevation: 100° /s²; Cross:100° /s²; Polarization: 100° /s²	
Antenna Motion Range	Azimuth: 360° continuous rotation; Elevation: -5° ~135° ; Cross: -30° ~30° ; Polarization: -100° ~100°	Azimuth: 360° continuous rotation; Elevation: -15° ~120° ; Cross: -30° ~30° ; Polarization: -100° ~100°
Initial Operating Time	≤120s	
Recovery Time	Short time defilade (<60s) : <3s; Long time defilade (≥60s) : <10s	
INS	Built-in, work without Gyro input	
Power Input	AC220V 50Hz Typ.250W(not include BUC)	
Operating Temperature Range	-40℃~65℃	

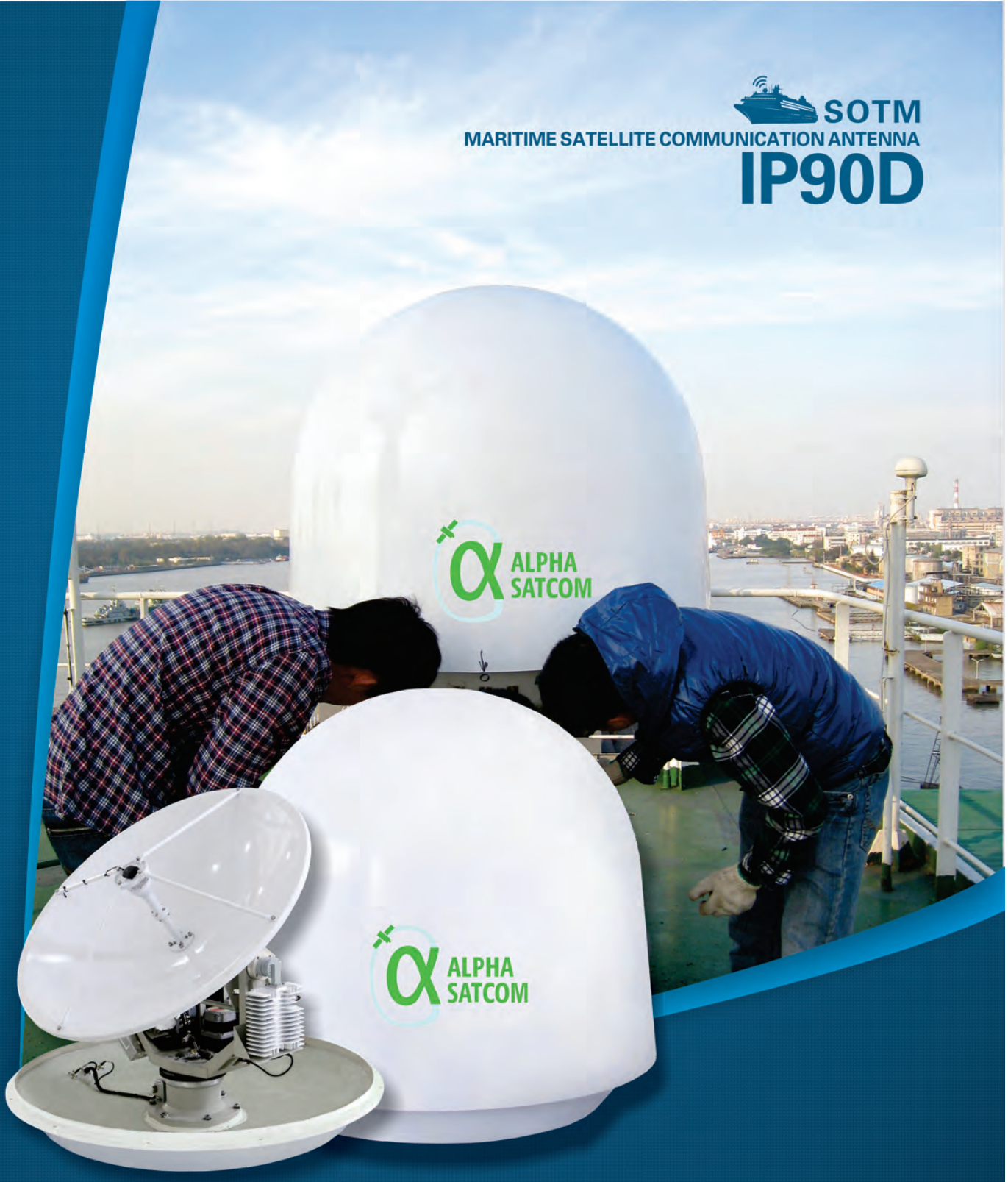
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MARITIME SATELLITE COMMUNICATION ANTENNA

IP90D



IP90D is a 90cm Ku-band maritime VSAT antenna system. With its 2-axis stabilization platform, IP90D provides the customer with a cost-effective solution in the majority applications.

- High accuracy GPS/INS integrated attitude azimuth measurement technology.
- 2-axis stabilization, 3-axis tracking, gear drive.
- ODU takes IP67 design, dehumidification device.
- Built-in lightning protection electric design.

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MARITIME SATELLITE COMMUNICATION ANTENNA

IP90D

SYSTEM DIAGRAM



IP 2-axis -Ku Band

Type	IP80D	IP90D
Stabilized Type	2-axis stabilization, 3-axis tracking, gear drive	
Reflector Size	80cm	90cm
Dimension (diameter×height)	105 ×100cm	113 ×105cm
Antenna Weight	65kg	70kg
Frequency Range	Rx: 10.7-12.75GHz; Tx: 13.75-14.5GHz	
Antenna Type	Ring focus back feed	
Antenna Gain	Rx: 37.3dBi (11.725GHz) Tx: 38.9dBi (14.125GHz)	Rx: 38.3dBi (11.725GHz) Tx: 39.9dBi (14.125GHz)
Cross-polarization Isolation	>35dB	
Side-lobe	Conform to ITU-R S.465-6	
Signal Polarization	Linear	
Tracking Accuracy	0.2° RMS	
Carrier Motion Range	Roll: -30° ~30° , 5s cycle; Pitch: -30° ~30° , 5s cycle; Yaw: 30° /s	
Angular Velocity	Azimuth: 100° /s; Elevation: 100° /s; Cross:100° /s; Polarization: 100° /s	
Antenna Motion Range	Azimuth: 360° continuous rotation; Elevation: -5° ~90° ; Polarization: -90° ~90°	
Initial Operating Time	ў120s	
Recovery Time	Short time defilade (<60s) : <3s; Long time defilade (≥60s) : <10s	
INS	Built-in, work without Gyro input	
Power Input	AC220V 50Hz	
Operating Temperature Range	-40℃~65℃	

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IP120



IP120 is a 1.2m Ku-band maritime VSAT antenna system. IP120 adopts high accuracy inertial navigation and cone scan peak tracking integration technology, which makes the antenna beam point at the satellite in the rough sea conditions or in the satellite zenith state.

- High accuracy GPS/INS integrated attitude azimuth measurement technology.
- 3-axis stabilization, 5-axis tracking, gear drive.
- ODU takes IP67 design, dehumidification device.
- Built-in lightning protection electric design.

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MARITIME SATELLITE COMMUNICATION ANTENNA

IP120

SYSTEM DIAGRAM



DATA SHEET

IP 3-axis -Ku Band




Type	IP120	IP180
Stabilized Type	3-axis stabilization, 4-axis tracking, gear drive	
Reflector Size	120cm	180cm
Dimension (diameter×height)	175 ×169cm	280 ×282cm
Antenna Weight	146kg	350kg
Frequency Range	Rx: 10.7-12.75GHz; Tx: 13.75-14.5GHz	
Antenna Type	Ring focus back feed	
Antenna Gain	Rx: 40.6dBi (11.725GHz) Tx: 42.2dBi (14.125GHz)	Rx: 45dBi (11.725GHz) Tx: 46.8dBi (14.125GHz)
Cross-polarization Isolation	>35dB	
Side-lobe	Conform to ITU-R S.465-6	
Signal Polarization	Linear	
Tracking Accuracy	0.2° RMS	
Carrier Motion Range	Roll: -30° ~30° , 5s cycle; Pitch: -30° ~30° , 5s cycle; Yaw: 40° /s	
Angular Velocity	Azimuth: 100° /s; Elevation: 100° /s; Cross:100° /s; Polarization: 100° /s	
Antenna Motion Range	Azimuth: 360° continuous rotation; Elevation: -5° ~135° ; Cross: -30° ~30° ; Polarization: -90° ~90°	
Initial Operating Time	≤120s	
Recovery Time	Short time defilade (<60s) : <3s; Long time defilade (≥60s) : <10s	
INS	Built-in, work without Gyro input	
Power Input	AC220V 50Hz Typ.200W(not include BUC)	
Operating Temperature Range	-40℃~65℃	

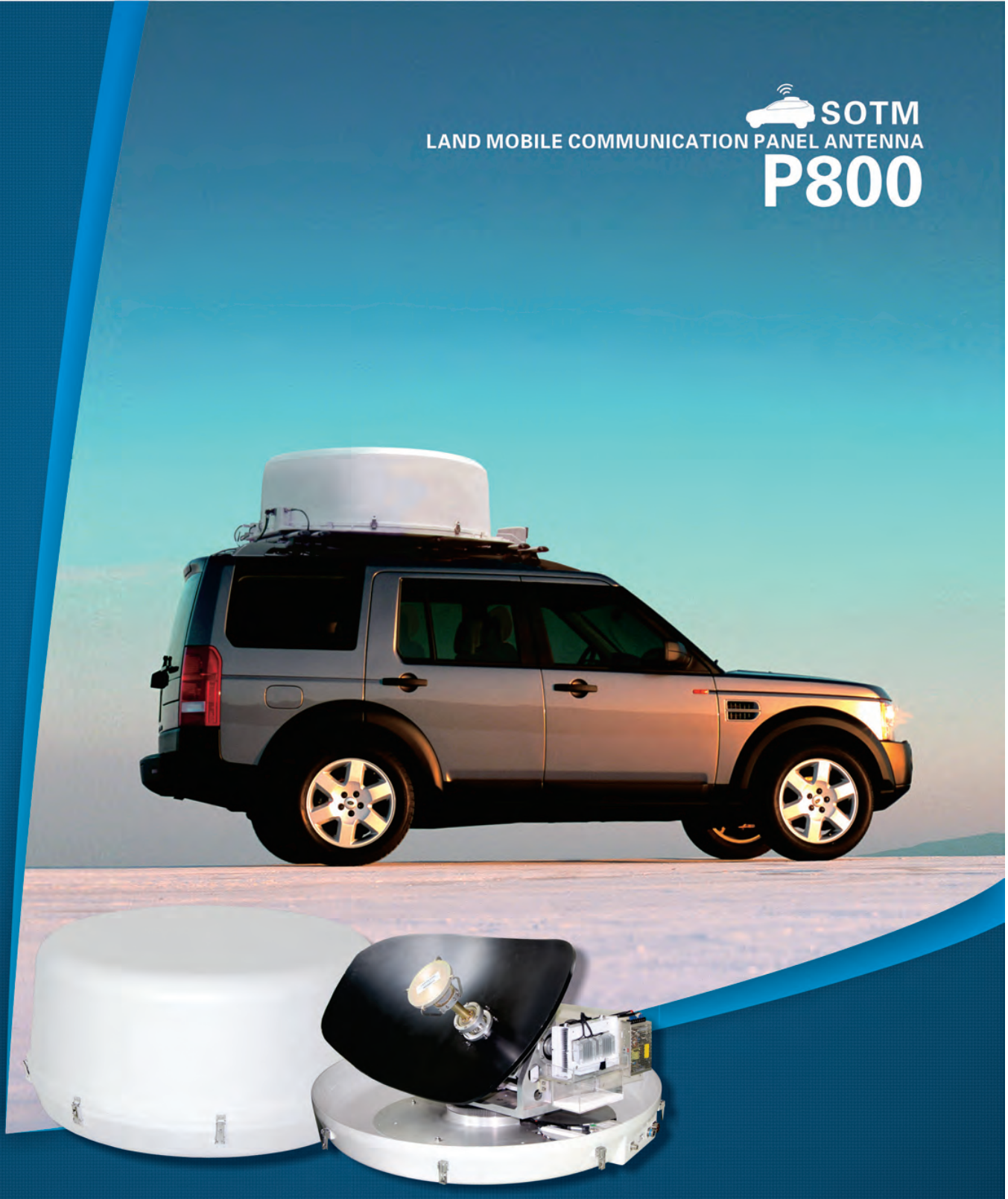
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LAND MOBILE COMMUNICATION PANEL ANTENNA

P800



P800 Land Mobile communication parabolic antenna is a ring focus back feed antenna which enables high gains while maintain mobility and superior effect. It is application in numerous types of communications.

- Ring focus back feed antenna, low weight and high accuracy.
- Carbon fiber honeycomb interlayer structure.
- High accuracy GPS/INS integrated attitude azimuth measurement technology.

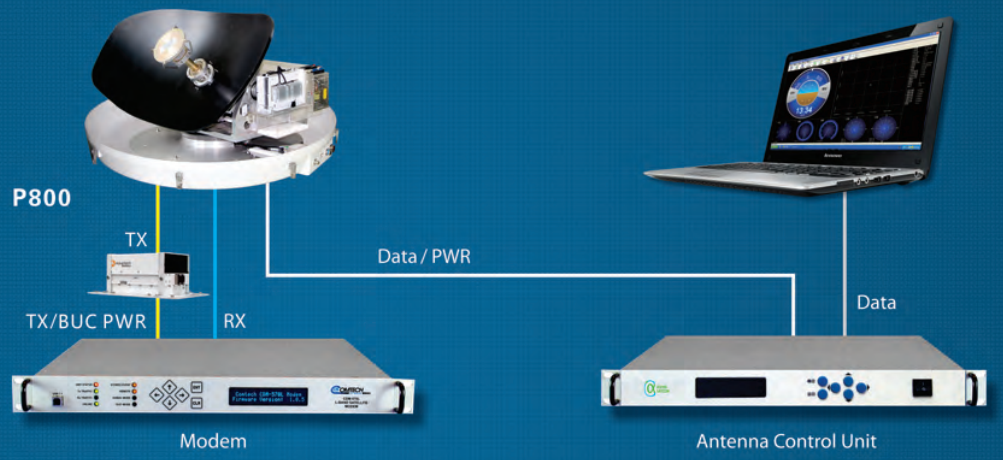
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LAND MOBILE COMMUNICATION PANEL ANTENNA

P800

SYSTEM DIAGRAM



DATA SHEET

Type	P800
Stabilized Type	2-axis
Dimension (diameter×height)	116 ×58cm
Antenna Weight	65kg
Frequency Range	Rx: 10.7-12.75GHz Tx: 13.75-14.5GHz
Antenna Type	Ring focus back feed
Antenna Gain	Rx : 37.2dBi (11.725GHz) Tx : 38.2dBi (14.125GHz)
Cross-polarization Isolation	>30dB
Side-lobe	Conform to ITU-R S.465-6
Signal Polarization	Linear
Angular Velocity	Azimuth: 150° /s; Elevation: 120° /s; Polarization: 100° /s
Angular Acceleration	Azimuth : 800° / s²; Elevation : 800° / s²; Polarization : 600° / s²
Dynamic Accuracy	0.2° RMS
Antenna Azimuth Rotation	360° continuous rotation
Elevation Range	0° ~90°
Antenna Polarization Rotation	-100ў~100ў
Capture Time	< 120s(static); < 180s (dynamic)
Re-capture Time	Lose less than 30s, instantaneous capture; Lose less than 1200s, re-capture time < 5s
INS	Built-in
Power Input	AC220V 50Hz
Operating Temperature Range	-40℃~65℃

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