Starwin Flat Pannel Portable Ku-Band VSAT Antenna

Description

The uSat terminal deploys cutting-edge flat array antenna system, which features flat shape and high gain. This is a completely new and novel antenna system designed and produced for a new generation of flat-type fully integrated satellite communication terminals. All components – antenna system, RF units, satellite router, WiFi devices and power supply are integrated into a flat compact terminal enclosure in subtle ways.

The uSat has completely changed the form of traditional VSAT terminals that normally uses the parabolic antenna systems for tens of years, providing users of satellite communication with a new, unique system that is both easy to deploy and operate. It aims to replace parabolic-shape antenna products that have been characterized by discrete type of installation, operation, debugging and maintenance.

Due to fast, simple and easy deployment, the uSat flat portable terminals are suitable for applications such as emergency services, disaster recovery, military, security, government and enterprise communication. Portable uSat terminals can be deployed within a very short time to achieve reliable data, voice and video transmission services in areas without terrestrial networks or in places where a temporary communication is required

Features:

* All-in-One, fully integrated: flat panel antenna, Modem, BUC, LNB, WiFi, Power Supply
* Higher gain, Higher antenna efficiency
* Small Size, Light weight for backpack
* Secure satellite lock in 3 min with mobile APP connected to terminal via Bluetooth
* 3.1 in. OLED display for quicker pointing satellite and checking real-time working status

Specification:

Antenna			
Model No.		FL60P-M	
Antenna Type		Slotted waveguide array antenna	
Equivalent to parabolic antenna size		0.6m	
RF Performance			
Frequency Range	Tx	13.75~14.50GHz	
	Rx	10.95~12.75GHz	
Polarization		Linear Horizontal / Vertical	
Rx Gain		≥35dBi	
Tx Gain		≥36dBi	
G/T		13dB/K	
EIRP		43dBW (6W BUC)	
First Sidelobe		≤15dB	
Power And RF Performance			
AC Power Supply		85~264VAC	
DC Supply Adapter		12~24VDC,120W (Optional)	
Typical Satellite Modem[1]		Any Modem whose size is below 200mmx280mm	
Typical BUC		3W / 6W /16W	
Typical LNB		PLL LNB 30K for TDMA systems PLL LNB 5K for SCPC systems	
Power Consumption[2]	3W BUC	45W (Manual Searching Satellite)	
		65W (Access Network)	
	6W BUC	45W (Manual Searching Satellite	
		85W (Access Network)	
	16W BUC	45W (Manual Searching Satellite	
		155W (Access Network)	
Mechanical Performance			
Satellite Acquisition		Manually pointing to satellite, level error<0.2°	
Azimuth Range		Unlimited, fine tune ±70°	
Elevation Range		7°~ 90°	
Polarization		±88°	
Terminal Dimensions		L 26.77 × W 25.59× H 8.66 in.	

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(Excluding cables and backpack)	L 680× W 650× H 220 mm
Terminal Weight (Excluding cables and backpack)	≤17 Kg 37.5 lb. (Max)
Environmental Performance	
Operational Wind	13.5m/s (49km/h)
Operational Temperature	-25°C to +50°C
Ingress Protection	IP66
Humidity	0 ~ 95%
96h Salt Fog Test	GJB 150.11A-2009
Low Pressure (Altitude) Test	GJB 150.2A-2009
High / Low Temperature Test	GJB 150.3A-2009/GJB 150.4A-2009
Temperature Shock Test	GJB 150.5A-2009
Vibration Test	GJB 150.16A-2009
Interfaces	
Power	AC Power SP/SD13-3 Cores waterproof aviation connector
Tx[3]	BUC IN F-Type Connector
Rx[4]	LNB OUT F-Type Connector
LAN	1× RJ45 10/100/1000
	1× RJ45 Modem Debug[5]
Debug[6]	SP/SD13-7 Cores waterproof aviation connector
Other Function	
Wireless Router	IEEE 802.11b/g/n at 2.4GHz Access number: 30 Coverage (Unobstructed):50~100m
Bluetooth Device	V4.2
GNSS Device Supports	GPS/GLONASS/BeiDou-2/Galileo
Batteries	3~15hours working time (3W BUC) [7]
Color	PANTONE P 168-12 U 
Accessories	
Power Supply	5m (196.86 in.)
Network Cable	5m (196.86 in.)
Approval	
FCC	
Intelsat Approval	

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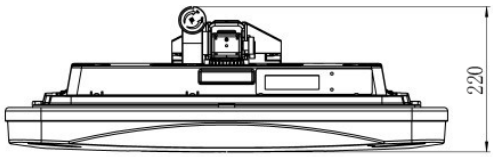
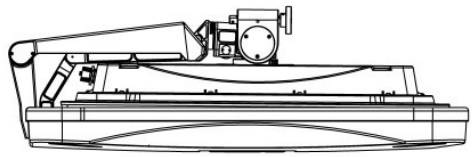
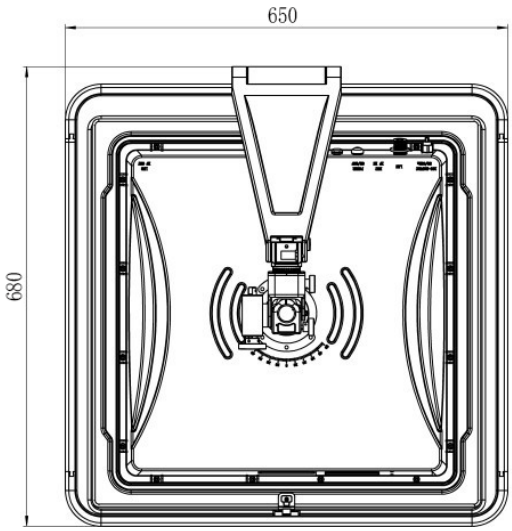
CE

1. According to customer's requirements.
2. The Terminal's power consumption is related to the Terminal model, Modem and BUC. This document takes the iDirect IQ200 Modem as an example to illustrate the Terminal's power consumption.
3. External modem connection, or switch between internal and external modem.
4. Downlink spectrum monitoring, or switching internal and external modem.
5. Modem upgrade/update interface.
6. ACU upgrade/update interface.
7. It can provide users with a variety of battery capacity configuration options. Due to different installation methods (Internal and External) and capacities, the power supply duration is different.

Terminal Dimensions:







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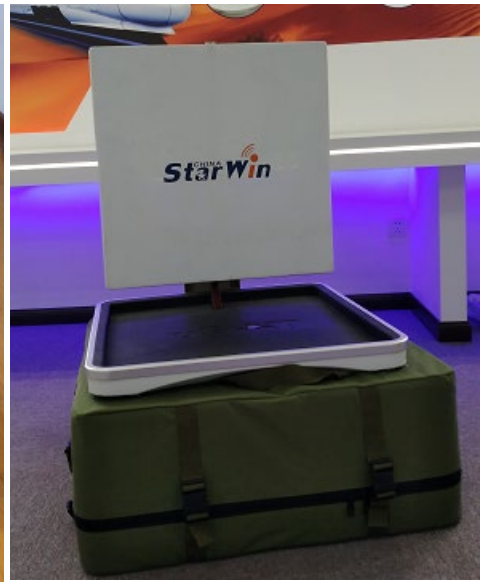
Terminal Package:





EPP Case



Backpack and Final package

Flat-Panel Portable Manual Terminal Packing List

Item	Description	L (mm)	W (mm)	H (mm)	Vol. (m^3)	N.W. (kg)	G.W. (kg)	Qty.	Pkg. Form
1	Flat-Panel Portable Manual Terminal FL60P-M	820	780	345	0.22	19.00	29.35	1	Carton Case
TOTAL					**0.22**	**19.00**	**29.35**	**1**	
Total Package: 1		**Total Vol.: 0.22cbm**			**Total N.W.: 19.00kgs**			**Total G.W.: 29.35kgs**	

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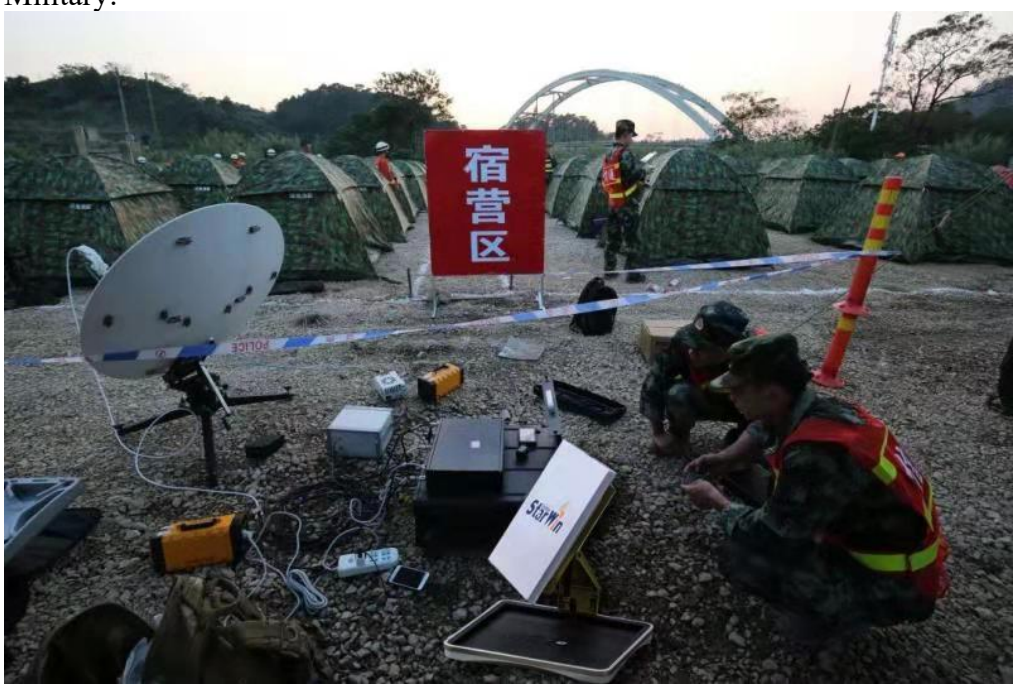
Application Case:

Emergency rescue:

Military:



Outdoor adventure

Communication:

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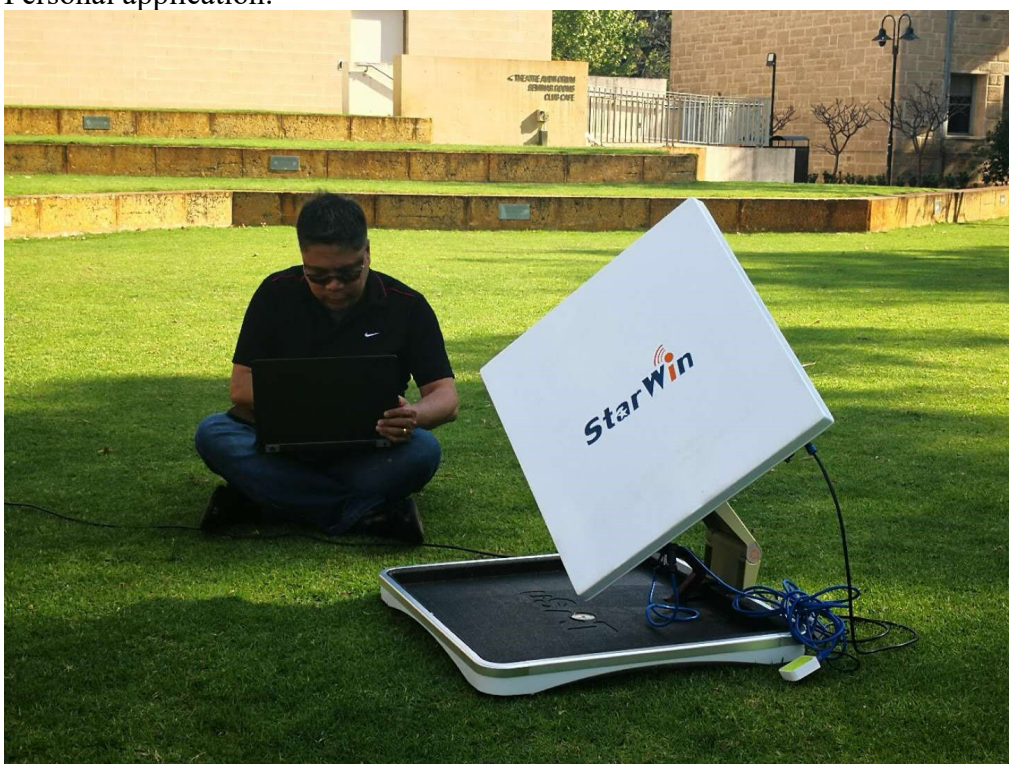
Personal application:



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