

QuickSat DA-120[®]

PROFEN's QuickSat DA-120[®] is a fully-automated, motorized, vehicle-mounted satellite uplink system designed for quick deployment and operation for Broadcast SNG and VSAT applications. The ultra-high performance single piece SMC antenna with ultra-robust aluminum motorized mount, is fully automated, and it has auto-acquisition and auto-peaking capability to any satellite in a few minutes for quick operation, even in harsh environment.

Its lightweight and state-of-the-art saturation makes it possible to install it on top of any kind of vehicle, from a small car to a big truck. This makes it an ideal choice for outdoor Broadcaster and VSAT applications in commercial and military market.

QuickSat DA-120[®] features a fully automated satellite acquisition and tracking system using PROFEN's Axis series ACU which is equipped all the necessary peripherals such as GPS and DVB receivers, Compass, Inclinometers for a proper satellite acquisition and carrier identification and auto-peaking.

QuickSat DA-120[®] antenna system optionally comes with an aerodynamic antenna cowl, which not only improve the driving performance and reduce the energy costs but also houses and protects the outdoor electronics against bad weather influences.



Key Features:

- Glass Fiber Reinforced Polyester SMC and lightweight aluminum motorized antenna mount.
- Ku-Band operation (Optionally Ka and X Band))
- 3- axis motorized pedestal with built-in manual drive gear system in case of emergency use.
- Quick operation with fully automated acquisition feature
- Intuitive and simple to operate for non-technical personnel
- Fully compliant with satellite operator specifications.

SPECIFICATIONS

RF Parameters:	Ku-Band	Ka-Band	X-Band
Rx Frequency Range (GHz)	10.7 – 12.75	18.2-19.2 or 19.2-20.20	7.25 – 7.75
Tx Frequency Range (GHz)	13.75-14.5 (optionally 13.0-14.5)	29.0 - 30.0	7.90 – 8.40
Polarization	Linear Orthogonal Standard Optional Co-Pol	RHCP or LHCP	RHCP or LHCP
G/T mid-band (30° elevation)	21.5 dB/° K with 50K LNA	22.7 dB/° K with 80K LNA	
Tx Gain (mid-band) (dBi)	42.5 dBi	49.5 dBi	37.5 dBi
Rx Tx Gain (mid-band) (dBi)	41.5 dBi	46.0 dBi	38.0 dBi
Antenna Noise Temperature @ 20° El, mid-band	30K	90K	48K
Cross-Polarization Isolation (dB)	-30 dB max with 1dB beamwidth -25 dB max any Angle off Axis	35 dB with 1dB beam width	35 dB with 1dB beam width
VSWR	1.30:1	1.30:1	1.30:1
Side Lobe Performance	ITU-R S.580-6	ITU-R S.580-6	ITU-R S.580-6
Power Handling Capability	0.5 KW per port	100W	1 KW
Mechanical Parameters		System & Environmental Parameters	
AZ/EL Drive	24VDC Motor with Worm Gear	Dimension (with cowling)	1300*1500*400mm, WxDxH
POL Drive	24VDC Motor with Worm Gear	Weight	70-90 Kg depending on options
Reflector	1.2m Single Piece Glass Fiber Reinforced Polyester SMC		
Mount	EL over AZ motorized	Temperature range Operational Survival	-30 to +60 °C -40 to +70 °C
Axis Travel Azimuth Elevation Polarization	400° (±200°) 0° to 90° of Reflector bore sight ±100° for 2-port feed	Wind Performance Operational Survival	50 kph 180 kph (Stowed)
AZ/EL Speed Slewing/Deploying (typical) Peaking (typical)	2.5°/second AZ; 1.5°/second EL 0.25°/second		
RF Interface BUC/SSPA/HPA Feed Boom Mounting LNA/LNB	Waveguide Cover Flange Up to 20Kg Waveguide Cover Flange		
Manual/Emergency Drive	Hand crank on Az, El, Pol		
Color	White (optional colors available)		

Antenna Control System

Features	PROFEN's AKIN series ACU with auto-acquisition and auto-peaking of selected satellites features. It can automatically also cross polarization alignment and optimization by evaluation the signal quality measured by the internal DVB or Beacon receiver. Hand-held controller or Smart Phone /Tablet application optionally provided.
Orientation	ACU is an Indoor 1RU and 19" Controller with LCD and keypad is provided as standard.
Power requirement	85 – 265 VAC, 45-65 Hz, 300W



Darulacaze Cad. Halit Ziya Turkan Sokak.
Famas Plaza A-Blok Kat 10 Okmeydani
34384 Sisli Istanbul TURKEY

TEL +90 (212) 210 27 70
FAX +90 (212) 210 27 73
www.profen.com