

ADMP-100-MOT

ADVSAT
ADVANCED SATELLITE EQUIPMENT

TECHNICAL SPECIFICATIONS

The ADVSAT® ADMP-100-MOT is a fully motorized, auto-acquire, 100cm carbon fiber manpack antenna. This robust and lightweight system will point to any programmed satellite with just the push of a button on the NEW ADVSAT® 8020 Controller. ADVSAT highly portable, multi-segment manpack can be hand-carried by one person and assembled in less than 10 minutes with no tools required.



Soft Case Solution (Standard)



8020 Controller



Features

- 100 cm 7-piece carbon fibre reflector
- Single Backpack Case Solution
- Operates in Ku, Ka or X band
- Designed to work with the iNetVu® 8020 Controller
- Monitor and Control Via Front Panel display or Web Interface
- 2 or 3 Axis Motorization
- Supports manual control when required
- One button, auto-pointing controller acquires Ku-band satellite within 30 seconds
- Captive hardware / fasteners
- No tools required for assembly / disassembly
- Set-up time less than 10 minutes, one person job
- 1 Year Standard Warranty

Application Versatility

The ADMP-100-MOT manpack system can be easily configured to provide quick access to satellite communications for any application that requires remote connectivity in a rugged environment. Ideally suited for applications that require a quick, simple set-up; in vertical markets such as emergency response, disaster management, public safety, broadcasting, media and more.

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Mechanical

Reflector	100 cm segmented carbon fibre
Number of Petals	7
Platform Geometry	Elevation over Azimuth
Antenna Optics	Centre Feed
Deployment Sensors	GPS antenna Compass $\pm 5^\circ$ Tilt sensor $\pm 0.05^\circ$
Azimuth	360° Continuous
Elevation	5° - 90°
Polarization	$\pm 90^\circ$
Elevation Deploy Speed	Variable, 11°/sec typ.
Azimuth Deploy Speed	Variable 11°/sec typ.
Peaking Speed	11°/sec (steps in $\pm 0.01^\circ$)

Environmental

Wind loading	
Operational	
With Ballast/Anchors	45 km/h (28.1 mph)
Survival	
With Ballast/Anchors	72 km/h (45 mph)
Temperature	
Operational	-20° to 55° C (-4° to 131° F)
Survival	-30° to 60° C (-22° to 140° F)
IP Protection	IP66
Humidity	0-100% (non-condensing)

Case

Single Backpack Soft Case (Empty):	5.4 Kg (12.0 lbs)
Size:	84 x 51 x 41 cm (33.0" x 20.0" x 16.0")
Weight: 2-Axis (Incl. Ku Antenna(1)):	22.8 Kg (50.2 lbs)
3-Axis (Incl. Ku Antenna(1)):	24.5 Kg (54.0 lbs)
Optional: Hard Case Size:	94cm x 55.2cm x 41.6cm (37" x 21.75" x 16.37")
Weight (TBD)	

Electrical

DC Input:	24VDC @ 3A (RMS)
Power Consumption:	
Idle:	12W
Operational (Max):	50W

Modem Compatibility

The DVB-S2/ACM Tuner is an integrated part of all ManPacks. It allows the iNetVu® system the option to find the satellite with and without the use of a satellite modem. Compact and adaptable, this high performance tuner is programmable to any DVB-S or DVB-S2/ACM frequency and allows the user to pre-configure specific satellite options.

Open AMIP

Gilat - Skyedge llc - Capricorn 4	UHP - 100/200
iDirect - Evolution - iQ200	
Newtec - Dialog - MDM3310	

Ku-Band (Linear)

Transmit Power	1 to 200 watt	
Feed	2 Port XPol	
	Receive	Transmit
Frequency (GHz)	10.70- 12.75 ⁽²⁾	13.75 - 14.50
Feed Interface	WR75	WR75 ⁽³⁾
Midband Gain ($\pm .2$ dBi)	40.10	41.40
Sidelobe Envelope Co-Pol (dBi)		
100 λ /D° < Θ < 7°	35-25 Log Θ	
7° < Θ < 9.2°	13.9	
9.2° < Θ < 48°	38-25 Log Θ	
48° < Θ < 180°	-4 Typical	
Cross-Polarization on Axis	>35 dB	
Within 1dB Beamwidth	>30 dB	
Tx/Rx Isolation	40 dB	85 dB
VSWR	1.3:1	1.3:1

Ka-Band (Circular)

	Receive	Transmit
Operating Frequency (GHz)	19.20 - 21.20 ⁽²⁾	29.0 - 31.0
Midband Gain ($\pm .2$ dBi)	44.50	47.60
Polarization X-POL	LHCP/RHCP	
Feed Interface	WR-42	WR-28
VSWR	<1.5:1	<1.25:1
Isolation (dB)	>55	>55

X-Band (Circular)

	Receive	Transmit
Operating Frequency (GHz)	7.25 - 7.75 ⁽²⁾	7.90 - 8.40
Midband Gain ($\pm .5$ dB)	36.40	37.0
Polarization X-POL	LHCP/RHCP	
Sidelobe Compliant with	DSCS Req.	
Feed Interface	WR-112	WR-112
VSWR	<1.25:1	<1.25:1
Isolation (dB)	>23	>23

Shipping Weights & Dimensions*

Shipping Soft Case Size:	92 x 61 x 46cm (36.0" x 24.0" x 18.0")
Shipping Weight:	2-Axis (Incl. Ku Antenna(1)): 27.7 Kg (61.0 lbs)
	3-Axis (Incl. Ku Antenna(1)): 29.5 Kg (65.0 lbs)

* The shipping weights/dims can vary for particular shipments depending on actual system configuration, quantity, packaging materials and special requirements

Notes:

⁽¹⁾ Weight indicated includes 4W BUC, LNB and 5m(16ft) Cables

⁽²⁾ LNB PLL Type required with stability better than ± 10 KHz

⁽³⁾ Maximum BUC dims supported: 9.8 cm x 9.8 cm x 4.2 cm (3.9" x 3.9" x 1.7"); 0.5Kg(1.1lbs)
Larger BUCs must use quick disconnect flex waveguide

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