MP-101-MOT



TECHNICAL SPECIFICATIONS

by C-COM Satellite Systems Inc.

The iNetVu® MP-101-MOT is a fully motorized, auto-acquire, 100 cm 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 iNetVu® 8050 Controller. The 8050 Controller supports DVB-52X and is fully compatible with a list of open AMIP supported modems. C-COM's highly portable, multi-segment Manpack can be hand-carried by one person and assembled in less than 10 minutes with no tools required.



Application Versatility

The MP-101-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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TECHNICAL SPECIFICATIONS

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 ± 5°

Tilt sensor \pm 0.1° Azimuth 360° Continuous

Elevation 5° - 90°

 $\begin{array}{ll} \mbox{Polarization} & \pm \, 90^{\circ} \mbox{ or LHCP/RHCP} \\ \mbox{Elevation Deploy Speed} & \mbox{Variable , 11°/sec typ.} \\ \mbox{Azimuth Deploy Speed} & \mbox{Variable $\pm \, 0.1^{\circ}$} \\ \mbox{Peaking Speed} & \mbox{Variable $\pm \, 0.1^{\circ}$} \end{array}$

Environmental

Wind loading Operational

With Ballast/Anchors 45 km/h (28.1 mph)

Survival

With Ballast/Anchors 72 km/h (45 mph)

Temperature

 $\begin{array}{ll} \text{Operational} & -20^{\circ}\,\text{to}\,60^{\circ}\,\text{C}\,(\text{-}4^{\circ}\,\text{to}\,140^{\circ}\,\text{F}) \\ \text{Survival} & -30^{\circ}\,\text{to}\,70^{\circ}\,\text{C}\,(\text{-}22^{\circ}\,\text{to}\,158^{\circ}\,\text{F}) \end{array}$

IP Protection IP66

Humidity 0-100% (non-condensing)

Case

Single Backpack Soft Case (Empty): 5.4 Kg (12.0 lbs)

Size: $84 \times 51 \times 41$ cm (33.0" x 20.0" x 16.0")

Weight: 2-Axis (Incl. Antenna⁽¹⁾): 22.8 Kg (50.2 lbs)

3-Axis (Incl. Antenna⁽¹⁾): 24.5 Kg (54.0 lbs)

Optional: Hard Case Size: 94cm × 55.2cm × 41.6cm (37" × 21.75" × 16.37")

Weight (Empty): 10.5 Kg (23 lbs)

Electrical

DC Input: 24VDC @ 6A (RMS)

AC/DC Adapter: Universal AC Input (100-277VAC) / 24VDC

Network Interface RJ45 Connector and WiFi (2.4GHz)

Power Consumption:

Idle: 12W Operational (Max): 50W

Modem Compatibility

The DVB-S2X 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 or DVB-S2X frequency and allows the user to pre-configure specific satellite options.

Open AMIF

HNS - HT2500 (dual IFL) Newtec - Dialog - MDM3310/MDM 2510/3XXX

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
Optional Low Ku	10.70- 11.70 ⁽²⁾	12.75 - 14.50
Feed Interface	WR75	WR75 ⁽³⁾
Midband Gain (± .2 dBi)	40.10	41.40
Sidelobe Envelope Co-Pol (dBi)		
100λ/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)	17.7 - 21.2 ⁽²⁾	27.5 - 31.0
Midband Gain (± .2dBi)	44.50	47.60
Polarization X-POL	LHCP/RHCP Manual	
Feed Interface	WR-42	WR-28
VSWR	<1.5:1	<1.25:1
Isolation (dB)	>55	>55

X-Band (Circular)

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

Receive

Shipping Weights & Dimensions*

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

Notes:

- (1) Weight indicated includes 4W BUC, LNB and 5m(16ft) Cables
- (2) LNB PLL Type required with stability better than \pm 10 KHz
- (3) Maximum BUC dims supported: 14 cm x 9.8 cm x 4.2 cm (5.5" x 3.9" x 1.7"); 1 Kg (2.2 lbs) Larger BUCs must use quick disconnect flex waveguide



Transmit

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