## requtech

At The Forefront Of Communications Technology

## PICO 120a O3b mPOWER



Delivered in pairs for precise tracking and seamless satellite switchover for O3b and O3b mPOWER



Fully integrated manpack terminal





Rapid deployment and tooless aseembly

The PICO120a is a **1.2m multi-orbit auto-pointing** terminal that takes portability and convenience to the next level. **Eutelsat characterized** and compliant with international standards the terminal is equipped with interchangeable feed systems, the PICO120a offers fast frequency band switching between **X**, **Ku**, and **Ka**. For seamless **MEO** operation, our terminals are provided in pairs, featuring advanced satellite tracking and handover capabilities, ensuring uninterrupted connectivity over the **SES O3b mPOWER constellation**. It also works effortlessly as a single terminal for **GEO** so you can always stay connected with the PICO120a. At the heart of the system lies the **RAPU** Unit that contains the ACU, Beacon receiver, control, monitor, and sensor kit module with Mercury app for **rapid satellite acquisition**.



Ka-band		
Feed	2 port or 4 port,Feed systems for optional BUC/LNB	
TX Frequency	27.5 – 30.0 GHz or 29 – 31GHz	
RX Frequency	17.7 – 20.2 GHz or 19.2 – 21.2 GHz	
EIRP	65.0 dBW (with 40W BUC) 62.0 dBW (with 20W BUC) 59.8 dBW (with 12W BUC)	
Polarity	Circular RHCP / LHCP, mechanical pol. change	
Flange for connections	WR28WR42	
Return-loss Tx/Rx	20 dB	
Isolation Tx-Rx	70 dB	
Tx gain @midband	49.6 dBi	
Rx gain @midband	46.5 dBi	
Tx AR	0.9 dB	
Rx AR	0.8 dB	
G/T Rx	24.9 dBi/K	

	Elevation adjustment	0-90°	
	Tracking speed	2 °/min (nominal)	
	Retracing time	Less than 30 seconds	
	Pointing stability	Less than 1dB loss from installation gain	
	Operational wind load	56 km/h with gusts up to 72 km/h, degraded performance up to 100km/h	
	Survival wind load	Up to 120 km/h (in pos. 90 deg. for beam)	
	Antenna must be bolted or tied to ground above 50 km/h wind load  Weights		
	Packaging in 3 hard Mil grade cases	50 kg	
	Option: 4 airship cases per antenna	Between 25 and 32 kg.	
	RAPU for fast satellite acquisition The Requtech Assisted Pointing Unit (RAP houses the Antenna Control Unit (ACU), and sensors required for assisted pointing, systemonitoring and control. The RAPU runs Requech's proprietary Mercury software suite; GUI can be accessed either by Android app ov		

Automatic positioner specification

±110°

Azimuth adjustment



RAPU) and all ystem Requte; its pp over WiFi/Bluetooth or Web interface via ethernet.

The RAPU can optionally be provided with an embedded modem and/or beacon receiver for a complete turnkey terminal solution. The ACU supports OpenAMIP communications and is OpenBMIP ready. This means that the ACU is able to communicate with most modems on the market. Please contact Requtech if your configuration requires other non-OpenAMIP modems.



Requtech AB, based in Linköping, Sweden, is at the forefront of satellite communication  $technology. \ We \ specialize \ in \ developing \ high-performance, reliable \ satellite \ communication$ systems. Our mission is to revolutionize communication capabilities, enhancing global connectivity through innovative solutions.

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