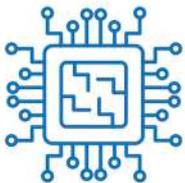


PICO 120a O3b mPOWER



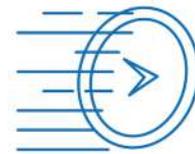
Delivered in pairs for precise tracking and seamless satellite switchover for O3b and O3b mPOWER



Fully integrated manpack terminal



Multiband



Rapid deployment and toolless assembly

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 PICO 120a. 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**.

SES[^] O3b mPOWER



TECHNICAL DETAILS

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	21.4 dBi/K

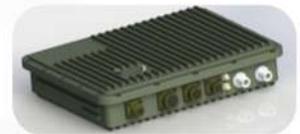
Automatic positioner specification	
Azimuth adjustment	±110°
Elevation adjustment	0-90°
Tracking speed	2 °/min (nominal)
Retracing time	Less than 30 seconds
Pointing stability	Less than 1dB loss from installation gain
Operational wind load	56 km/h with gusts up to 72 km/h, degraded performance up to 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 Requitech Assisted Pointing Unit (RAPU) houses the Antenna Control Unit (ACU), and all sensors required for assisted pointing, system monitoring and control. The RAPU runs Requitech's proprietary Mercury software suite; its GUI can be accessed either by Android app 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 Requitech if your configuration requires other non-OpenAMIP modems.



Requitech 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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