HUGHES
An EchoStar Company

DATASHEET

HL1120W Hughes LEO Terminal

Mackay
Marine Electronics &
Satellite Communications

The Hughes HL1120W User Terminal (UT) includes a low-profile Electronically Steered Antenna (ESA) that represents the leading edge of Low Earth Orbit (LEO) antenna technology. The HL1120W ESA is a full-duplex, self-aligning terminal with a built-in modem. It has no moving parts and is optimized for operation over the OneWeb Ku-band LEO satellite constellation – providing access to affordable, fast, high bandwidth and low latency communications service. The HL1120W UT is ideal for a variety of applications for everyone, everywhere, all the time.

The HL1120W ESA is designed for the outdoor environment. It is lightweight, low-power, weather-tight and easy to install and maintain. It is constructed with a durable aluminum chassis and is configured to function right out of the box, self-pointing to the satellite constellation. The HL1120W UT is compact, easy to install and makes optimal use of the OneWeb system capabilities for low latency and high speeds.

The HL1120W user terminal includes the following indoor unit (IDU).

- HL1120W IDU: Wi-Fi 6 router with two GigE LAN ports, MoCA adapter for ethernet over coax and external power supply.

RF Specifications

TX Frequency	14.0 GHz to 14.5 GHz
RX Frequency	10.7 GHz to 12.7 GHz

Performance

Peak Downlink Data Rate	195 Mbps
Peak Uplink Data Rate	32 Mbps
EIRP	+36.6 dBW (Dual Carrier)
G/T	Up to 11.3 dBK

Environmental and Mechanical Specifications

Operating Temperature	-40 °C to +55 °C (-40°F to +131°F)
Outdoor Unit (ODU) Dimensions	59.7 cm x 82.8 cm x 11.2 cm (23.5 in. x 32.6 in. x 4.4 in.)
ODU Weight	24.0 kg (53 lbs)
ODU Power	300 W (max), 150 W (typ)
Indoor Power Supply	100 V to 240 V AC Local 28 Volt pedestal power option
Local Ethernet Interface	IDU with 2 RJ45 LAN ports
IFL Cable Length	Up to 70 m (231 ft) with standard RG-6 dual coax.
Agency Compliance:	CE, FCC, Anatel[1]
Safety Compliance:	UL, CE, IEC, UKCA

Network Configuration

Network	OneWeb Satellite Constellation
Network features	IP, differentiated QoS, multi-APN

[1]*Expected by March 2024.*
All specs subject to change.

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