



Intellian “Compact” OW terminal

Compact Flat Panel for Land Mobility

The OW10HV is the ideal Flat Panel UT for the first responder, forestry and transportation markets, offering a small lightweight and sleek form factor, designed to outperform existing connectivity solutions. Intellian’s Flat Panel Series consists of a portfolio of Enterprise and Compact user terminals, based on active electronically scanned arrays (AESA) for Fixed Enterprise, Maritime and Land Mobility customers.

Optimized Performance

Utilizing Intellian’s innovative antenna design, the OW10HV delivers optimal performance in a compact form factor making it the ideal connectivity solution for use cases that are SWaP constrained. The resulting solution provides the user experience and service levels that customers expect.

Customer Network Exchange

Intellian’s Customer Network Exchange (CNX) units are a critical component of any OneWeb user terminal installation, providing both the power and data connectivity to the Flat Panel user terminal, and the connectivity to customer equipment and networks. CNX variants are offered for specific deployment scenarios including Land Fixed, Maritime and Land Mobility.

Seamless Connectivity

The OW10HV features Intellian’s advanced tracking technology improving connection reliability and availability, even on rough roads and at the lowest elevation angles encountered in equatorial regions. Ensuring minimal loss



over scan, the innovative flat panel technology facilitates smooth reliable handovers, which ensure seamless and uninterrupted connectivity.

Harsh Environment Performance

The OW10HV is designed to ensure dependable performance in even the most demanding environments, operating in extremely low temperatures down to -40 °C and up to +55 °C (-40 °F to 131 °F). Integrated radar rejection filtering ensures performance in high interference installations and reliable broadband services for customers situated in the most remote locations.

Simplified Installation

The lightweight design and compact form factor of the OW10HV enables easy installation by a single person. The universal mount design supports a variety of vehicle mounts. Installation is further simplified through use of combined power and data over a single coax cable connecting the outdoor and in-vehicle units. The use of Intellian’s mobile app for site survey, automated configuration, and monitoring further reduces the time required to get online.

Intellian “Compact” OW terminal

Technical Specifications

Indoor Units	CNX-WIFI	CNX-RACK-AC	CNX-MOBILITY
Dimensions	21 cm x 17 cm x 8 cm (8.2" x 6.7" x 3.1")	44.2 cm x 25 cm x 4.4 cm (19" x 1 RU chassis)	30 cm x 20 cm x 4 cm (11.8" x 7.9" x 1.6")
Weight	0.6 kg (1.3 lb)	6.3 kg (13.9 lb)	1 kg (2.2 lb)
Power	18 W (max), 8 W (avg)	30 W (max), 16 W (avg)	18 W (max), 8 W (avg)
Operating Temp	0 °C to +40 °C (32 °F to 104 °F)	-25 °C to +55 °C (-13 °F to 131 °F)	-25 °C to +55 °C (-13 °F to 131 °F)
Data Interface	WiFi-6 4-port GigE RJ45	8-port GigE RJ45, 1x USB (Type-A) 1x NMEA0183 / 1x NMEA2000	4-port GigE RJ45 1x NMEA 0183 / 1x NMEA2000
Power Input	Universal AC Power (100 – 240VAC)	Dual 450 W Power Modules 100 – 240 VAC (CNX-RACK-AC)	External Power Supply Adapter (AC and DC variants available)

Outdoor Unit

Throughput (peak)	DL: 60 Mbps / UL: 10 Mbps
G/T	9 dB/K
EIRP	+36.6 dBW (Dual Carrier)
Field of View	+/- 55° from Zenith, 360° Azimuth
Size	56 cm x 45 cm x 12 cm (22" x 17.7" x 4.7")
Weight	8 kg (17.6 lb)
Power	180W (max) 150W (avg)
Ingress	IP66
Operating Temp	-40 °C to +55 °C (-40 °F to 131 °F)
Interface	+56VDC, F-Type conn

System Diagram

