VAISALA

Power Junction Box PJB480



PJB480 with WMT700 on pole mast

Features

- Provides operational and heating power for WMT700
- Allows heating WMT700 sensor transducers, arms, and body
- Designed for demanding conditions, such as maritime use and cold climates
- IP66 waterproof enclosure
- Robust enclosure of stainless steel

Vaisala Power Junction Box PJB480 provides operational and heating power to Vaisala WINDCAP® Ultrasonic Wind Sensor WMT700. PJB480 is designed for demanding conditions, such as maritime use and cold climates.

Prevents buildup of ice and snow

PJB480 is equipped with two 24 V DC power supplies and has a maximum output power of 480 W. It provides power for keeping WMT700 operational and heated, thus preventing buildup of ice and snow. With PJB480, WMT700 can be fully heated (including sensor transducers, arms, and body) to keep the sensor functional in the harshest and coldest environments. PJB480 supports one WMT700.

Withstands harsh weather

PJB480 withstands low temperatures, down to −55 °C (−67 °F). Its enclosure is waterproof (IP66) and made of stainless steel. A mounting plate for wall installation is included in the delivery. You can also mount PJB480 on a mast using an optional APPK-SET mounting kit. Install PJB480 directly to a bulkhead without the mounting plate.

Meets maritime standards

PJB480 is a durable solution for cold climates and demanding maritime conditions. It is compliant with IEC 60945 standards. PJB480 can be used with a standalone WMT700 or with a WMT700 that is part of a Vaisala automatic weather station.

Technical data

Operating environment

Operating temperature	−55 … +55 °C (−67 … +131 °F) [1]
Storage temperature	−60 … +70 °C (−76 … +158 °F)
Operating humidity	0–100 %RH, non-condensing
Maximum operating altitude	2000 m (approx. 6500 ft)
IP rating	IP66

1) Cold start at −40 °C (−40 °F)

Inputs and outputs

Input voltage	100–240 V AC
Input current	10 A
Operating frequency	50/60 Hz
Output voltage	24 V DC
Output current	16 A
Maximum output power	480 W
Nominal output power	300 W

Spare parts and accessories

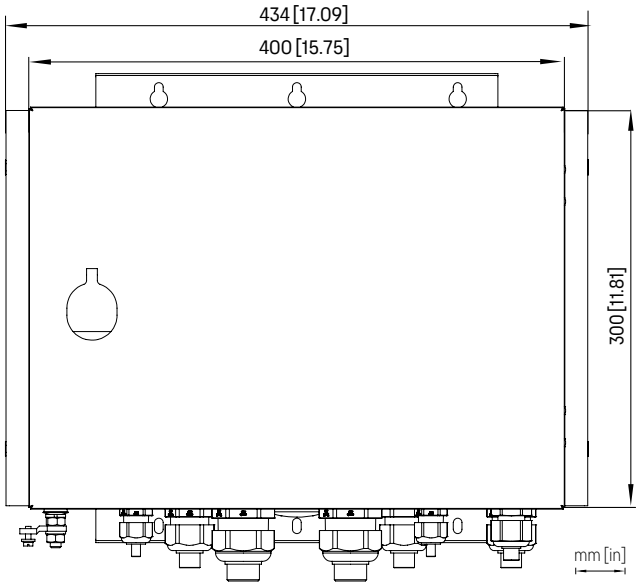
Fuse, 2 A, glass tube 5 × 20 mm (0.79 in)	3595
Surge protector	254404SP
Mounting kit for pole mast, Ø 60 mm (2.36 in)	APPK-SET60
Mounting kit for pole mast, Ø 75 mm (2.95 in)	APPK-SET75
Mounting kit for pole mast, Ø 100 mm (3.94 in)	APPK-SET100
Mounting kit for pole mast, Ø 106 mm (4.17 in)	APPK-SET106
AC (mains) power cable	To be purchased separately. Min. 3 × 1.5 mm^2 (15 AWG)

Mechanical specifications

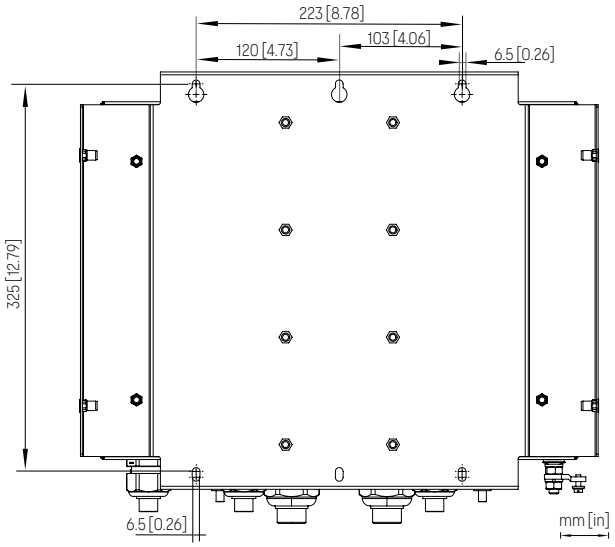
Enclosure dimensions (H × W × D)	300 × 400 × 200 mm (11.81 × 15.75 × 7.87 in)
Weight	14 kg (30 lb)
Materials (enclosure and mounting plate)	Stainless steel AISI 316 / EN 1.4404
Coating (enclosure and mounting plate)	Painted white, polyester powder coating RAL9003

Environmental compliance

Maritime	IEC 60945
Vibration	IEC 60068-2-6/IEC 60945
Dry heat	IEC 60068-2-2
Damp heat	Cyclic IEC 60068-2-30
Low temperature	IEC 60068-2-1
Corrosion and salt mist	IEC60068-2-52, VDA 621-415



PJB480 dimensions, front view



PJB480 dimensions, back view

Compliance

EU directives and regulations	Low Voltage Directive (2014/35/EU) RoHS Directive (2011/65/EU) as amended by 2015/863 EMC Directive (2014/30/EU)
Compliance marks	CE, China RoHS, RCM
Electrical safety	61010-1:2010 + A1:2019
Environmental	EN IEC 63000:2018
Electromagnetic compatibility (EMC)	
Emissions	EN 55032:2015 + A11:2020, Class B
Immunity	EN/IEC 61321-1:2020-2021, industrial environment

VAISALA

vaisala.com

Published by Vaisala | B211730EN-C © Vaisala 2025

All rights reserved. Any logos and/or product names are trademarks of Vaisala or its individual partners. Any reproduction, transfer, distribution or storage of information contained in this document is strictly prohibited. All specifications — technical included — are subject to change without notice.