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MIS-GPSXX-TMG-SPI-XXN REV 3

PRODUCT WARRANTY

A. General Warranty. PCTEL, Inc ("PCTEL") represents and warrants that the Products furnished hereunder shall be free from defects in material and workmanship for a period of two (2) years from the date of shipment by PCTEL under normal use and operation. PCTEL sole and exclusive obligation under the foregoing warranty shall be to repair or replace, at its option, any defective Product that fails during the warranty period. The expense of removal and reinstallation of any item is not included in this warranty. THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTIES ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICE WITH RESPECT TO THE PRODUCTS. Repair or replacement in the manner provided herein shall be the sole and exclusive remedy of Buyer for breach of warranty and shall constitute fulfillment of all liabilities of PCTEL with respect to the quality and performance of the Products. PCTEL reserves the right to inspect all defective Products (which must be returned by Buyer to PCTEL factory freight prepaid). No Products will be accepted for replacement or repair without obtaining a Return Materials Authorization (RMA) number from PCTEL Customer Service [by telephone: 630.372.6800 or email: antenna.techsupport@pctel.com]. Products returned without an RMA number will not be processed and will be returned to Buyer freight collect. PCTEL shall have no obligation to make repairs or replacement necessitated by catastrophe, fault, negligence, misuse, abuse, or accident by Buyer, Buyer's customers or any other parties. The warranty period of any repaired or replaced Product shall not extend beyond its original term. B. Warranty Conditions. The foregoing warranty shall apply only if: (i) the Product has been properly installed and used at all times in accordance, and in all material respects, with the applicable Product documentation; (ii) no modification, alteration or addition has been made to the Product by persons other than PCTEL or PCTEL's authorized representatives or otherwise approved by PCTEL; and

(iii) The Product has not been subjected to misuse, neglect or unusual physical, electrical or electromagnetic stress, or some other type of accident. C. Disclaimer. PCTEL DOES NOT WARRANT THAT THE OPERATION OF THE PRODUCTS IS ERROR-FREE OR THAT OPERATION WILL BE UNINTERRUPTED. IN NO EVENT SHALL PCTEL BE RESPONSIBLE FOR DAMAGES OR CLAIMS OF ANY NATURE OR DESCRIPTION RELATING TO (i) SYSTEM PERFORMANCE, INCLUDING COVERAGE, (ii) BUYER'S SELECTION OF PRODUCTS FOR BUYER'S APPLICATION AND/OR (iii) FAILURE OF PRODUCTS TO MEET GOVERNMENT OR REGULATORY REQUIREMENTS.

RETURNS In the unlikely event a defect occurs in this product, please work through the dealer or distributor from which this product was purchased. PCTEL, Inc. provides complete service and support to all of its dealers and distributors.





GNSS TIMING W/ INTEGRATED SURGE INSTALLATION

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Installation Instructions

Read these instructions thoroughly before installation or assembly. Follow the sequence for proper assembly and operation.

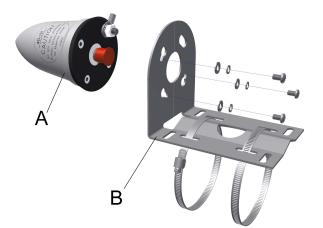
Notice - The installation, maintenance, or removal of antenna systems requires qualified, experienced personnel. Antenna systems should be inspected once a year by qualified personnel to verify proper installation, maintenance, and condition of equipment.

Antenna Description:

GPSXX-TMG-SPI- XXNCB (cover) is a self-contained GPS antenna and mount kit. The kit includes a right hand circularly polarized antenna that incorporates a high performance, low noise amplifier. It also includes a medium duty L mount bracket to attach the antenna to a vertical and horizontal pipe within a range of diameters detailed below.

Contents:

A - 1ea Timing Antenna w/ surge and watershed gasket. B - 1ea Medium Duty Mount Kit - ** Mount kit may contain extra hardware and gasket depending on product Type installed. Extra components can be discarded.



MOUNTING KIT DESCRIPTIONS

Range of Mounting Pipe Diameters for Medium Duty Bracket Mount Kit.

The L mount Bracket Kit attaches the GPS antenna on vertical or horizontal pipes and beams with a diameter ranging from 2 $\frac{1}{2}$ - 8 $\frac{1}{2}$ in [60mm-215mm] diameter. **Note – installation of antenna requires an unobstructed clear view to the sky.**

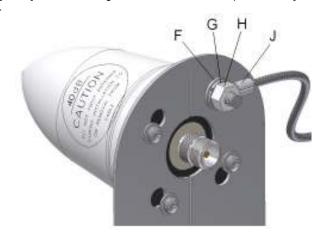
TOOLS REQUIRED FOR INSTALLATION

- (1) Type II Crossed Recessed Screw Driver
- (2) Adjustable Wrench or 3/8 wrench.
- (3) Crimping pliers

Antenna/Mount Assy – remove protective cap and grounding hardware from antenna. Align Water Shed Gasket to mounting holes and orient antenna onto bracket – Gasket may distort prior to installation. Install screw hardware[C,D,E] opposite ground stud. Rotate into place and tighten - Recommended torque 5-8lbf*in [1Nm.



Repeat for remaining screws x2. Assemble (AWG-6/16mm^2 min) Grounding cable to crimp lug [J] fasten with supplied hardware [F,G,H]. Do not over tighten - Recommended torque 5-8lbf*in [1Nm.



Mount to Mast Assy – position antenna onto Mounting structure. Route hose clamps and tighten x2.



Attach the other end of grounding cable to shortest possible ground connection. Attach coax cable, and Install weatherproofing (not provided with the Mount Kit) extending at least 2" below the bottom of the connector to directly underneath the base plate of the antenna.