

### PW2222-301

# S-Band RHCP TX 2x2 Test Hat

#### **Features**

- ✓ Compact size and lightweight
- ✓ Wide operating temperature range

### **Benefits**

- ✓ Commercial off-the-shelf (COTS)
- ✓ Strong and repeatable coupling
- ✓ Easy to mount and dismount
- ✓ Minimal impact on antenna matching
- ✓ No mounting bracket required on the platform
- ✓ RF shielding to protect users and to prevent violation of regulatory limits during testing.
- ✓ Consultation services available (link budget, architecture and system design)



#### **Product Overview**

Test Hats serve as the perfect companion for testing the link during integration of PlaneWave antennas on the space platform. All of the PlaneWave's space antennas include Test Hat mounting features which eliminate the need for adding extra brackets on the platform.

PlaneWave Test Hats are compact in size, and without significantly impacting antenna matching, they provide strong coupling to the antenna which enables consistent, accurate and reproducible measurements.

#### **Related Products**

| Part Number | Description                        |
|-------------|------------------------------------|
| PW2222-101  | S-Band RHCP TX 2x2 Antenna         |
| PW2222-100  | S-Band RHCP TX Omni Antenna        |
| PW2222-110  | S-Band Dual-CP TX Omni Antenna     |
| PW2020-000  | Active S-Band RHCP RX Omni Antenna |
| PW2020-110  | S-Band Dual-CP RX Omni Antenna     |
| PW1515-001  | Active GPS L1 Antenna              |

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# **Electrical Specifications**

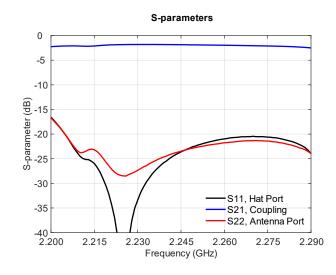
| Parameter / Condition | Min  | Тур  | Max  | Unit |
|-----------------------|------|------|------|------|
| Operating Frequency   | 2200 |      | 2290 | MHz  |
| Polarization          |      | RHCP |      |      |
| VSWR                  |      |      | 2:1  |      |
| Coupling              | 2    | 3    | 4    | dB   |

# **Mechanical Specifications**

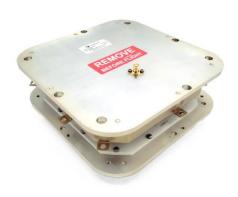
| Parameter / Condition | Value      | Unit | Limits |
|-----------------------|------------|------|--------|
| Connector             | SMA Female |      |        |
| Mass                  | 440        | g    | Max    |
| Compatible Antenna    | PW2222-101 |      |        |

# **Environmental Specifications**

| Parameter / Condition | Min | Тур | Max | Unit |
|-----------------------|-----|-----|-----|------|
| Operating Temperature | -70 |     | 100 | °C   |
| Storage Temperature   | -70 |     | 100 | °C   |

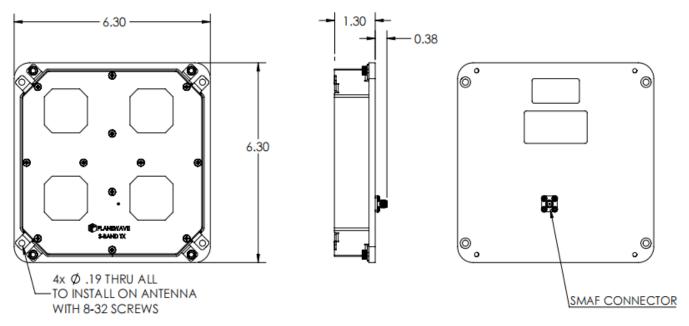


Test Hat + Antenna Assembly, Exploded View





### **Mechanical Outline**



#### Dimensions shown in inches.

Tolerances - Two Place Decimal: ±0.010, Three Place Decimal: ±0.005

### Contact PlaneWave, Inc.

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