

Preco Electronics

Process Specification

PV2000 transmitter alignment for frequency and amplitude.

1. SCOPE

- 1.1 This procedure is to define the alignment of the PV2000 back up alarm transmitter for center frequency and amplitude.

2. PURPOSE

- 2.1 The purpose of this procedure is to ensure proper alignment of the transmitter section of the PV2000 back up alarm.

3. RESPONSIBILITY

- 3.1 It is the responsibility of R&D Engineering to create, maintain and update this specific document.

4. EQUIPMENT REQUIRED

- 4.1 HP 8596EM EMC Analyzer or equivalent.
- 4.2 EMCO Model 3115 horn antenna or equivalent.
- 4.3 Pyrimid 13.8 VDC power supply or equivalent.
- 4.4 R.F. cable rated for 5.8 GHz .
- 4.5 Preco built alignment table.

5. DEFINITIONS

- 5.1 Alignment stub.
 - 5.1.1 A small piece of copper stock .0015in thick, .0500in wide, and lengths varying from .0500in to .3000in.

6. PROCEDURES

- 6.1 Alignment.
 - 6.1.1 Place PV2000 in recessed area on top of alignment table with the fins pointing toward the horn antenna..
 - 6.1.2 Connect the EMCO horn antenna and the HP 8596EM EMC Analyzer with the R.F. cable, and locate the horn antenna in the cabinet of the alignment table pointing up.
 - 6.1.3 HP 8596EM EMC Analyzer settings.
 - 6.1.3.1 Spectrum analyzer mode.
 - 6.1.3.2 Center frequency, 5.8 GHz.
 - 6.1.3.3 Frequency span, 3.0 GHz.
 - 6.1.3.4 Amplitude, auto.

- 6.1.4 Power up unit
- 6.1.5 Place alignment stubs on the transmitters printed circuit board and optimize the output signal to a center frequency of $5.8 \text{ GHz} \pm 25 \text{ MHz}$ and an amplitude of -41 dbm .