

MPRR Tune-up Procedure

The Encompass 4 is factory calibrated for peak power. For peak power, the Encompass 4 is set to transmit a CW signal at 902.25 MHz at full power. This output signal is measured with an Agilent power meter (Model no. E4419B) and a high power sensor (Model no. E9301H). With the temperature compensated digital feedback control loop (TDCFCL) running, the loop reference value for peak power, which is stored in the Field Programmable Gate Array (FPGA) is adjusted to center up the peak power level to 33 dBm +/- 0.25 dB. Once this reference value is stored, the TDCFCL automatically controls the peak power across frequency and operating power levels. The unit is then tested to meet the following specifications: Power output range +18 to +33 dBm, in 1 dB steps; Accuracy +/-1.0 dB, over frequency range; Stability +/-1.25 dB, from -40 to +70 °C.