Cresta II Output Power Measurement

The output power was measured using a Gigatronics 8541C power meter and Gigatronics 80350A peak power sensor. The output signal was routed through a 1meter low –loss cable to a –3 dB hybrid. One of the hybrid outputs was terminated into the power sensor with another low- loss 1 meter cable and the other output was terminated into a 20 dB attenuator and the spectrum analyzer (H-P 8563E). The peak sensor was internally triggered from the power meter when the power meter saw the level above –10dBm. The device under test was sending packets with a short inter - packet gap of 60 uS. The payload was approximately 2000 uS long. The measured output power at the sensor was 19.24 dBm. After measurement of the aggregate insertion losses from transmitter to the power sensor using the network analyzer (H-P 8753E), the additional loss was 5.2 dB from transmitter to power sensor head. The peak output power therefore is 24.44 dBm.