

Telephonics Corporation's APS-143C(V)3 is a pulse compression radar system that can transmit either a Fixed Frequency or Linearly Frequency Modulated (LFM or chirp) RF pulses between 9243 MHz and 9707 MHz at various chirp bandwidths (BW's), pulse widths (PW) and pulse repetition frequencies (PRF's). The table below defines those parameters. The radar transmitter utilizes a frequency agility technique whereby, regardless of the chirp bandwidth, the transmit spectrum occupies the entire transmit bandwidth from 9243 MHz to 9707 MHz, albeit not instantaneously.

Emission Designator	PW, micro-seconds	PRF, Hz	LFM (Chirp) BW, MHz
14MONON	0.110	2491	0, fixed frequency
14MONON	10.0	2491	0, fixed frequency
14MONON	10.0	1513	0, fixed frequency
6M00FXN	36.0	877	5.27
11M0FXN	36.0	877	10.54
14M0FXN	40.0	750	14.0
14M0FXN	40.0	395	14.0
14M0FXN	10.0	2491	14.0
14M0FXN	10.0	1513	14.0
19M0FXN	20.5	400	18.75
22M0FXN	36	877	21.1
38M0FXN	20.5	400	37.5
43M0FXN	36	877	42.2
75M0FXN	20.5	800	75.0
87M0FXN	30	1200	86.7
180MFXN	24.3	1024	178.5
180MFXN	24.3	878	178.5
180MFXN	24.3	731	178.5

Table 1. Telephonics APS-143C(V)3 Radar Transmitter Characteristics