

CHAPTER 2

SPECIFICATION

TECHNICAL SPECIFICATIONS

1 The technical specifications for the MkVII S-band Transceiver are as follows:

Transmitter:

Frequency: 3050 $\pm$ 10 MHz

Magnetron Rating: 30 kW nominal

Magnetron Life: 10,000 Hours typical

Pulse length and P.R.F:

Short(S) nominal 0.055 s
3000pps $\pm$ 100

Medium(M) nominal 0.2 s
1500 pps $\pm$ 40

Long(L) nominal 0.9 s
750 pps $\pm$ 20

Long-Low PRF(VL) nominal 1.0 s
375 pps $\pm$ 10

Sync. Output: 2 x 75 Ohm outputs
not less than +12V amplitude

Pulse to Pulse Jitter: This will normally be activated and is nominally 15 s
from nominal period. This function can be inhibited.

The PRF and Pulse Length can be set to other values via the RS232 link.

The above values are nominal settings.

Receiver specifications are detailed overleaf.

Receiver:

Type	Logarithmic Receiver
I.F.	60 MHz
Video Output	2 x 75 +5.5V to 6V peak signal
System Overall Noise Figure	Nominal 6.0 dB

OPERATING TEMPERATURE RANGES

Turing Mechanism

Ambient Range	-25°C to +70°C
Humidity	95% at +40°C

Downmast Transceiver

Ambient Range	-15°C to +55°C
Humidity	95% at +40°C

FOR TURNING MECHANISM

Azimuth Data:	180 pulses per revolution
Heading Data:	1 pulse per revolution

INPUT POWER

Input Power Single Phase:	110V/220V AC input 155 W, 220 VA
Input Power Three Phase:	
Low Speed:	0.55 kW 0.75 kVA
High Speed:	2.2 kW 3 kVA