B790 Series
Multi Band Tracking Receivers

INPUT SPECIFICATION   Options

1.	Input Range:	Two or more segments of: 3.4 - 4.2GHz, 7.25 - 7.75GHz, 10.7 - 12.75GHz	
2.	Input connectors:	SMA	
3.	Number of inputs	**Pol 1** / **Pol 2**, separate inputs for C, X and Ku-band. Active band selected by front panel or remote interface frequency selection. Pol selection via front panel or remote interface.	
4.	Impedance:	50Ω	
5.	Input return loss:	15dB typical	
6.	Nominal beacon input level:	-80dBm	
7.	Maximum beacon input level:	-70dBm	
8.	Maximum aggregate power level:	-30dBm	

OUTPUT SPECIFICATION

9.	Range:	±10V DC	0V to 10V DC [*]
10.	Scale:	Logarithmic	
11.	Connector:	BNC (also interface connector)	
12.	Impedance:	0Ω (ideal voltage source, maximum current 5mA)	
13.	Adjustment range:	Output adjustable to 0V for input power levels from -70dBm to -110dBm	
14.	Display:	16-character alphanumeric LCD	
	dB mode:	-199.9 to +199.9	
	Volts mode:	-9.99 to +9.99	

TRANSFER CHARACTERISTICS

15.	In/out characteristic:	Log conformal	
16.	In/out voltage slope:	2dB/V	0.5 to 4dB/V [*]
17.	Post-detection time constant:	100ms	10ms to 10s [*]
18.	DC voltage adjust:	To 0V for -70dBm to -110dBm	
19.	Level meter adjust	To ±199.9 for -70dBm to -110dBm	
20.	Step size:	10kHz	
21.	Automatic search:	±200kHz	±75kHz to ±1MHz [*]

TRACKING PARAMETERS

22.	PLL noise bandwidth:	2kHz
23.	Threshold for reacquisition of lock:	<43dBHz
24.	Average search time:	<1s

MISCELLANEOUS

25.	Power supply:		115V/230V ±10% 50/60Hz ±10%, 30VA
26.	Mechanical:		1U 19" frame, 400mm
27.	Temperature:	Operating:	0° to 50°C
		Storage:	-40° to 85°C
28.	Relative humidity:	Operating:	0 to 90%
		Storage:	0 to 95%
29.	Summary alarm:		NO and NC dry relay contacts via rear mounted connector
30.	Summary alarm indication:		Through front panel LED and remote interface
31.	Remote control:		● RS232 or RS422/RS485, connector D-type 9P F
			● Serial emulation over TCP/IP, connector RJ45
			● SNMP and HTTP over TCP/IP Ethernet, connector RJ45
			Control: beacon frequency
			Monitor: beacon frequency, output voltage and alarm status

[*] These parameters are not field adjustable. To be specified at time of order.

MODEL TABLE

Input band	PLL 300Hz, threshold <35dBHz [1]	PLL 2kHz, threshold <43dBHz [2]
3.4 - 4.2GHz 10.7 - 12.75GHz	B790P	B795P
3.4 - 4.2GHz 7.25 - 7.75GHz 10.7 - 12.75GHz	B7901P	B796P This model is compatible with NATO, Skynet and DSCS X-band satellite BPSK beacons

[1] Models recommended for antenna and propagation experiments.
[2] Models recommended for antenna tracking.