DEM 8400RX

The DEM 8400RX is an 8400-8500 MHz receive converter designed to deliver the full 100 MHz assignment of the X Band deep space downlink frequency band. Utilizing any SDR receiver within the 300 and 1300 MHz operating range, the user may choose the specific IF frequency range selected from our seven listed options. The 8400RX is designed to be mounted at the antenna feed point to eliminate feed line loss and to maintain its low noise temperature characteristics. It may be externally DC powered but is designed to be power though the IF coax from your SDR receiver or an optional Bias T inserted between the SDR receiver and the 8400RX. Mechanically, the converter is housed in a weather proof aluminum housing that is chemical treated to prevent oxidation. It is provided with mounting brackets to be attached to any mast or mechanical structure that your antenna is mounted to.

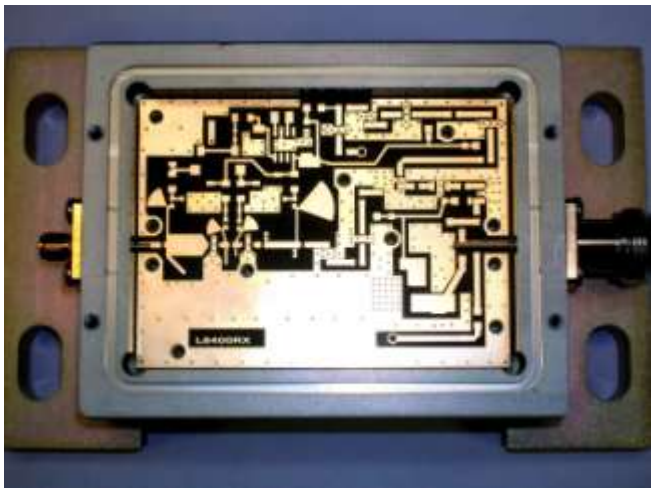
Electrical specifications are as follows:

System Noise Temperature:	<75 degrees K or 1.0dB NF
System Gain:	>20dB or 35 dB (selectable option)
DC current drain maximum:	< 450 ma @ +12VDC
RF and IF connector types:	SMA or type N (selectable option)
Frequency Stability:	+/- 200 Hz (case temperature variable)
Physical Size without Brackets:	3.8” x 3.0” x 1.25”

Order options include external DC connection or IF Coax bias. The IF Frequency options listed below are to optimize your systems performance depending on the SDR receiver of choice. All are assumed to convert the full operational band of 8400 to 8500 MHz.

IF Option #	IF Frequency Range in MHz
1	1300-1400
2	948 -1048
3	732 -832
4	520 -620
5	480 -580
6	432 - 532

Operation outside of the 8400-8500 MHz range will have degraded performance. If you have RF frequency requirements outside of this range, please consult us with your requirements.



Ready for your custom assembly