

X-BAND



X

WR112

7.839 / 8.150 GHz

23

X-band repeater block is transceiver with LNA (low-noise amplifier) which is used for amplifying of weak signals in X-band.

Signal gain is carried out by two amplifier blocks and bandpass filters. These amplifying lines are connected to respective branches of ferrite circulators. Thus created the diplexers. Received signals are frequency divided by diplexers obtained from both inputs. The first block of amplifiers and bandpass filters amplify the signal with a center frequency of 7.839 GHz, and the second block – with a center frequency of 8.150 GHz. These amplifying lines with inputs / outputs are connected to respective branches of the ferrite circulators. Circular inputs are connected to the strip / waveguide transitions of WR112 waveguides. Their flanges are the inputs / outputs of X-band repeater block.

At X-band repeater block inputs / outputs are located the strip / waveguide adaptors. Their waveguide flanges are used for connecting the low-noise amplifier modules to the antennas. The voltage of X-band repeater block is supplied via PC4 type connector.

KEY FEATURES:

- Compact sizes
- Wide supply voltage range: +15...+30 VDC
- High efficiency – supply current is less than 300 mA
- Output power @P1dB: 23 dBm
- Waveguide flanges: WR-112
- 1st center frequency of 7.839 GHz and 2d center frequency of 8.150 GHz
(or other via customized form)
- 40 MHz band for center frequency

- 35 dB gain (not less)

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1	7.839 GHz (40 MHz)
2	8.150 GHz (40 MHz)
:	
1 2 dB	35
1 2 dB	5.0
@P1dB dBm	23
1 2 dBm IMD3 – 45dBc	+15...16
(1 2) dB	+/- 0.6
RF:	
/	1.5
/	WR-112
/	15 dB
:	
	PC4
V	+15...+30 VDC
mA	300 mA max
:	
	-30 +60°C

	0% 95%
:	
(W x H x D)	134 x 47.9 x 178.8
kg	3 kg

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