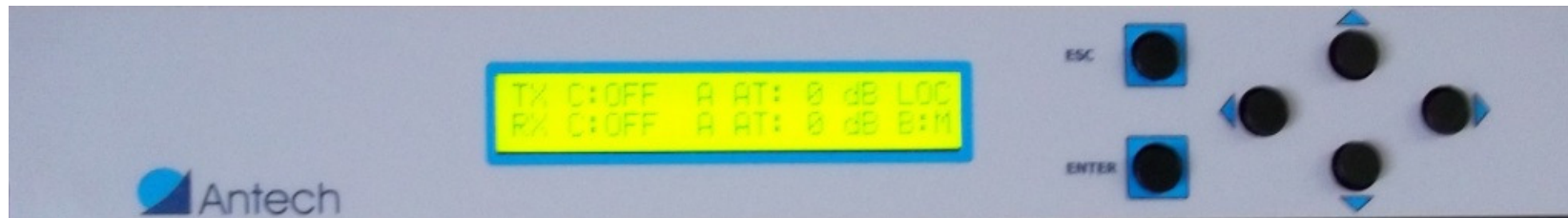
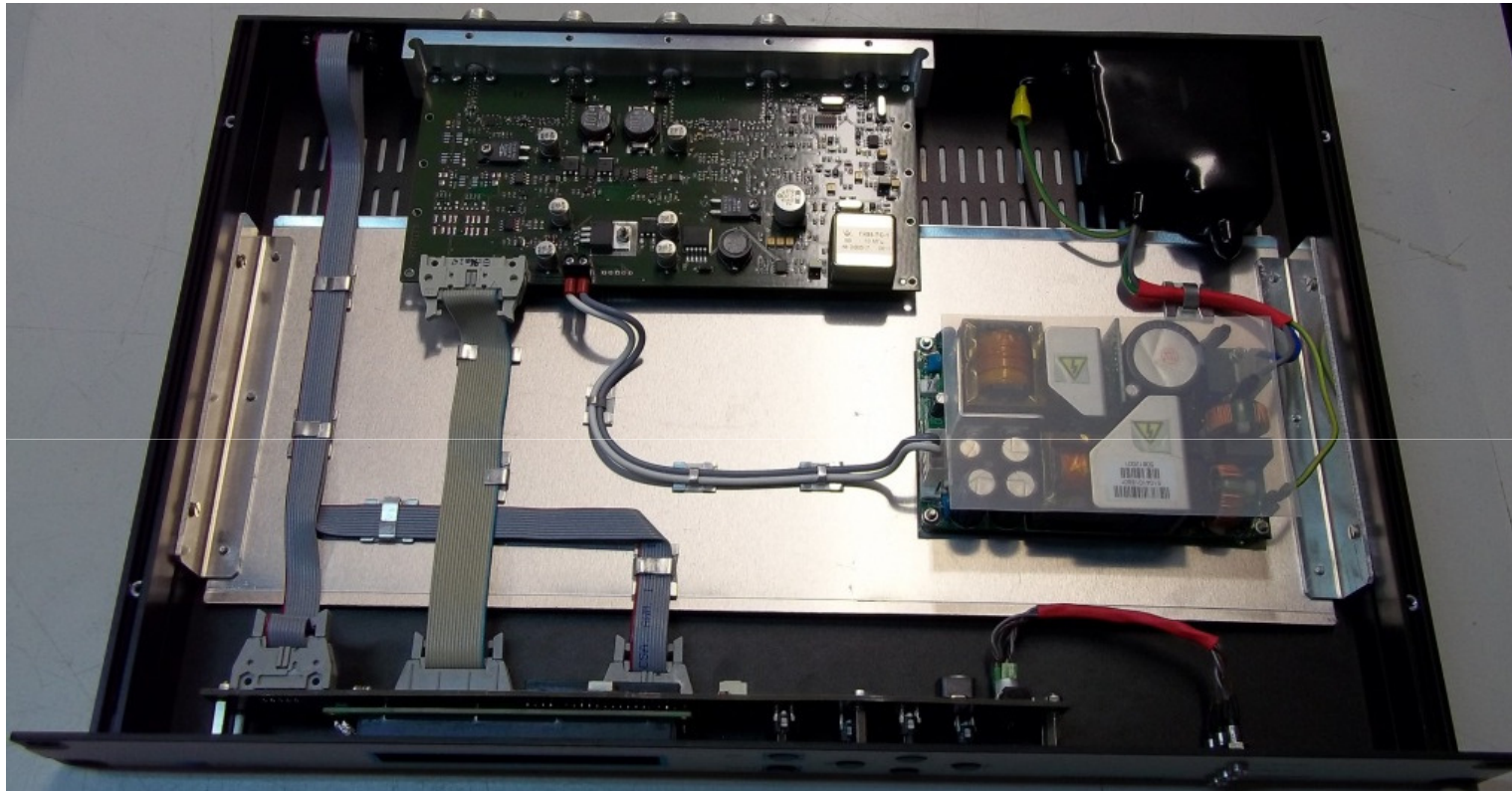


DESIGN EXAMPLE – RX/TX INTERFACE



DESIGN EXAMPLE – RX/TX INTERFACE

PARAMETER	VALUE
OPERATING FREQUENCY RANGE	850 – 2150 MHz
TX MAX GAIN	18 dB min
RX MAX GAIN	30 dB min
TX GAIN ADJUSTMENT	0 ÷ 21 dB, step 1 dB
RX GAIN ADJUSTMENT	0 ÷ 21 dB, step 1 dB
GAIN FLATNESS	± 0.25 dB 40 MHz
GAIN SLOPE	0.5 dB 100 MHz
INPUT RETURN LOSS	15 dB typical
OUTPUT RETURN LOSS	15 dB typical
NOISE FIGURE	9 dB
1dB COMPRESSION POINT TX	+12 dBm
1dB COMPRESSION POINT RX	+10 dBm
REFERENCE SOURCE FREQUENCY	10 MHz
REFERENCE POWER OUTPUT	0 ± 1.5 dBm

DESIGN EXAMPLE – RX/TX INTERFACE

PARAMETER	VALUE
REFERENCE SOURCE INTERNAL TYPE	OCXO
REFERENCE SOURCE AGING	$\pm 5E-8/\text{year}; \pm 5E-10/\text{day}$
REFERENCE SOURCE TEMPERATURE STABILITY	$\pm 1E-7$ 0-50° C
REFERENCE SOURCE HARMONICS	< -28 dBc
REFERENCE SOURCE PHASE NOISE @ 1 HZ	< 85 dBc/Hz
REFERENCE SOURCE PHASE NOISE @ 10 HZ	< 115 dBc/Hz
REFERENCE SOURCE PHASE NOISE @ 100 HZ	< 140 dBc/Hz
REFERENCE SOURCE PHASE NOISE @ 1 KHZ	< 150 dBc/Hz
REFERENCE SOURCE PHASE NOISE @ 10 KHZ	< 155 dBc/Hz
EXTERNAL REFERENCE NOMINAL INPUT LEVEL	13 dBm
EXTERNAL REFERENCE INPUT TO OUTPUT ATTENUATION	12 ± 1 dB
EXTERNAL FREQUENCY CLEANER	OK
EXTERNAL REFERENCE LEVEL THRESHOLD	10 dBm typ

DESIGN EXAMPLE – RX/TX INTERFACE

PARAMETER	VALUE
EXTERNAL TO INTERNAL REFERENCE SELECTION	Automatic, when the ext. Reference is below the threshold
REMOTE CONNECTION	RS232/RS422 and summary alarm
POWER REQUIREMENT	90 ÷ 264 V AC, 100W, 50/60 Hz (3 single PSU' s)
LNB POWER (RX SIDE)	11.5 ÷ 19 V DC, 500 mA via common port, SW enable with power up memory status
