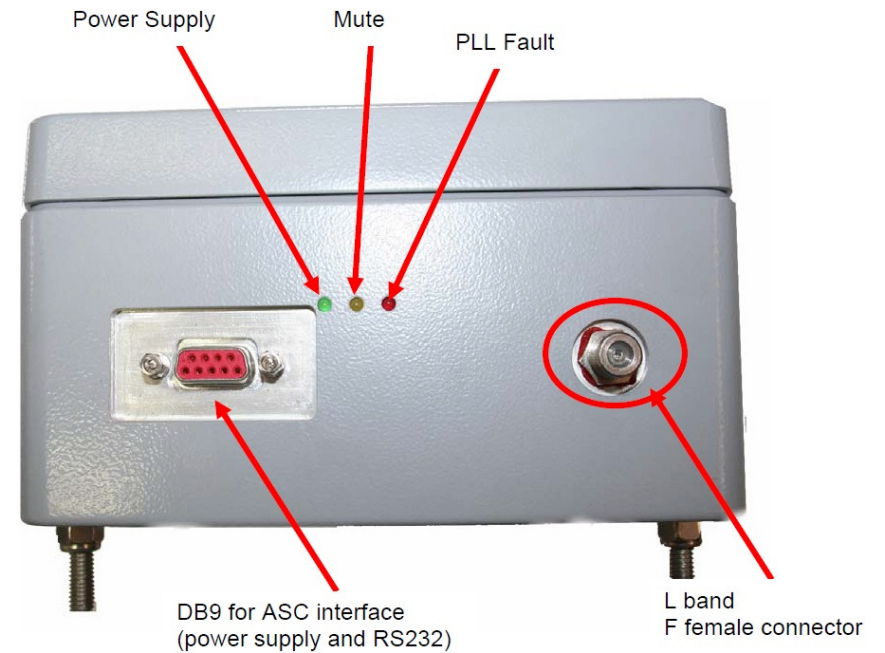
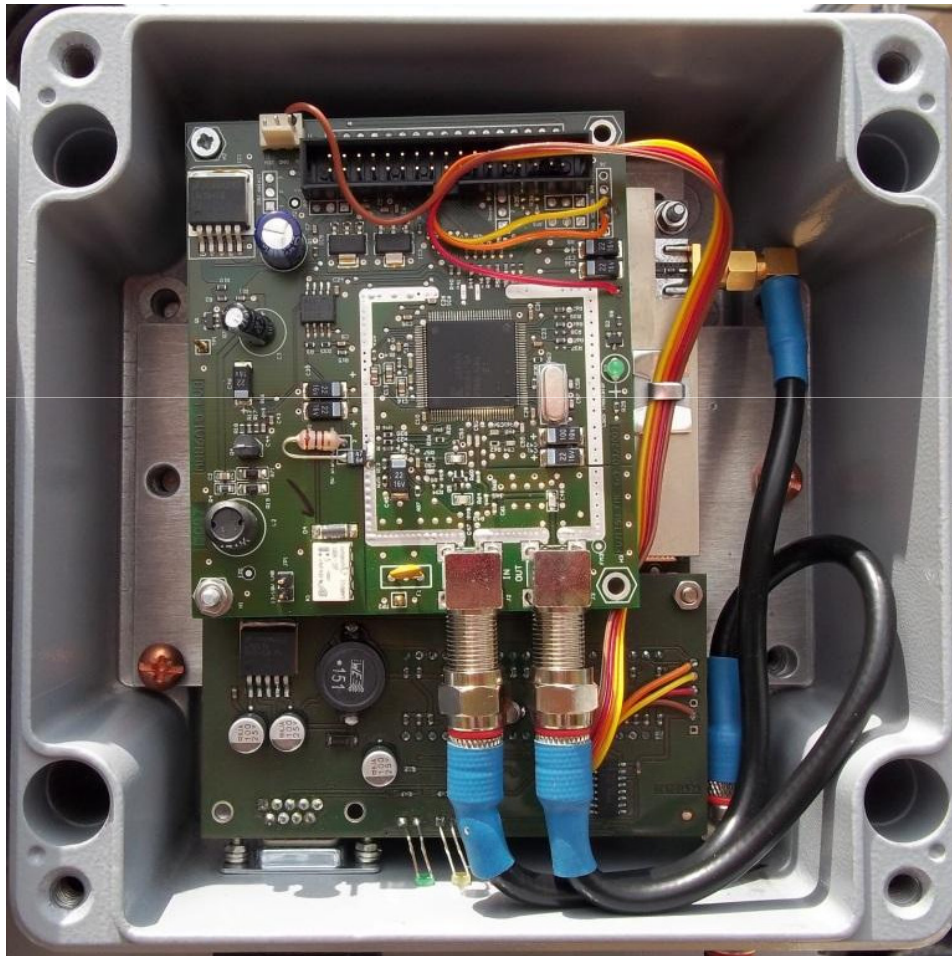


## DESIGN EXAMPLE – BEACON RECEIVER



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The screenshot displays the Antech Antenna Control Unit WebGui interface. The browser window shows the URL `http://192.168.123.123/index.zht`. The page title is "Antenna Control Unit WebGui - Antech S.p.A. - Satellite communications". The interface features a dark blue sidebar on the left with the Antech logo and navigation menu items: "Antenna Pointing", "Setup", "Sat Pointing", "Beacon Rx", "Tracking", "Info", and "Manual Step". The main content area is titled "Beacon" and contains a configuration panel for the receiver. The "Rx Level" is set to  $-14.50\text{dBm}$ . The configuration parameters are as follows:

Parameter	Value	Action
RF_Receive_Frequency_(MHz):	11198.04	Apply
Local_Oscillator_Frequency_(MHz):	9750	
Attenuation_(dB):	00.00	Apply
Measurement_Bandwidth:	100 kHz	Apply
Analog_Output_Voltage (V):	10.10	
Receive_Level_Alarm:	OK	
Frequency_Tracking_Alarm:	OK	
Synthesizer_Lock_Alarm:	OK	
Beacon_Link_Alarm:	OK	

## DESIGN EXAMPLE – BEACON RECEIVER

PARAMETER	VALUE
INPUT FREQUENCY	950 to 1950 MHz (2150 MHz on request)
STEP SIZE	1 kHz, other on request
AMPLITUDE RESPONSE	$\pm 0.1$ dB over 100 kHz
FREQUENCY STABILITY	Better than 1 kHz (0 to 50° C), other on request
INPUT DYNAMIC RANGE	-40 dBm to -95 dBm, with 0 dB input attenuator
INPUT ATTENUATOR	0 to 31 dB
ATTENUATOR STEP SIZE	1 dB
INPUT IMPEDANCE	50 $\Omega$ (opt. "I": 75 $\Omega$ )
INPUT RETURN LOSS	Better than 19 dB
NOISE FIGURE	Better than 18 dB
C/N0 THRESHOLD	52 dBc/Hz @ 5% slope error 48 dBc @ 40% slope error
AMPLITUDE STABILITY	0.02 dB @ 25° C after warm-up (30 minutes)
DETECTION BANDWIDTH	$\pm 20$ kHz narrow band $\pm 40$ kHz wide band
DC OUTPUT	0 to 10 VDC

## DESIGN EXAMPLE – BEACON RECEIVER

PARAMETER	VALUE
IMPEDANCE	1 k $\Omega$
SLOPE	220 mV/dB
RF L BAND INPUT	F female
DC OUTPUT	DB9 connector
ALARM	Dry contact NO or NC on DB9-M connector
REMOTE CONTROL	RS232

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