

LBNA-LNNA

UHF WIDEBAND ANTENNA (470÷870 MHz)



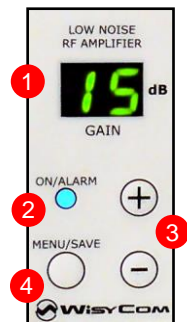
LBNA/LNNA is a wideband UHF antenna LPDA (LOG PERIODIC DIPOLE Array).

It enhances reception providing approx 6 dB gain with typical beam-width of 90 degrees.

It embodies a signal amplifier with digital control adjustable gain. Weather resistant, it grants perfect working even in outside locations.

Booster Module

- 1 2 digits LED display with booster **gain indication [dB]**.
Brightness can be adjusted through the user menu.
- 2 Signaling LED, multicolor:
 - white* : when turning-on indicates the booster start up
 - yellow* : booster bypassed, antenna becomes passive
 - green* : active booster with gain between 1 ÷ 8 dB
 - blue* : active booster with gain between 9 ÷ 15 dB
 - red* : fast blinking, powering insufficient (lower than $\approx 9,5Vdc$)
- 3 + / - , adjusting buttons
- 4 MENU/SAVE, selection button allows to edit the following parameters (after 5 second gain indication is restored by default).



BOOSTER GAIN SETUP, from normal indication:

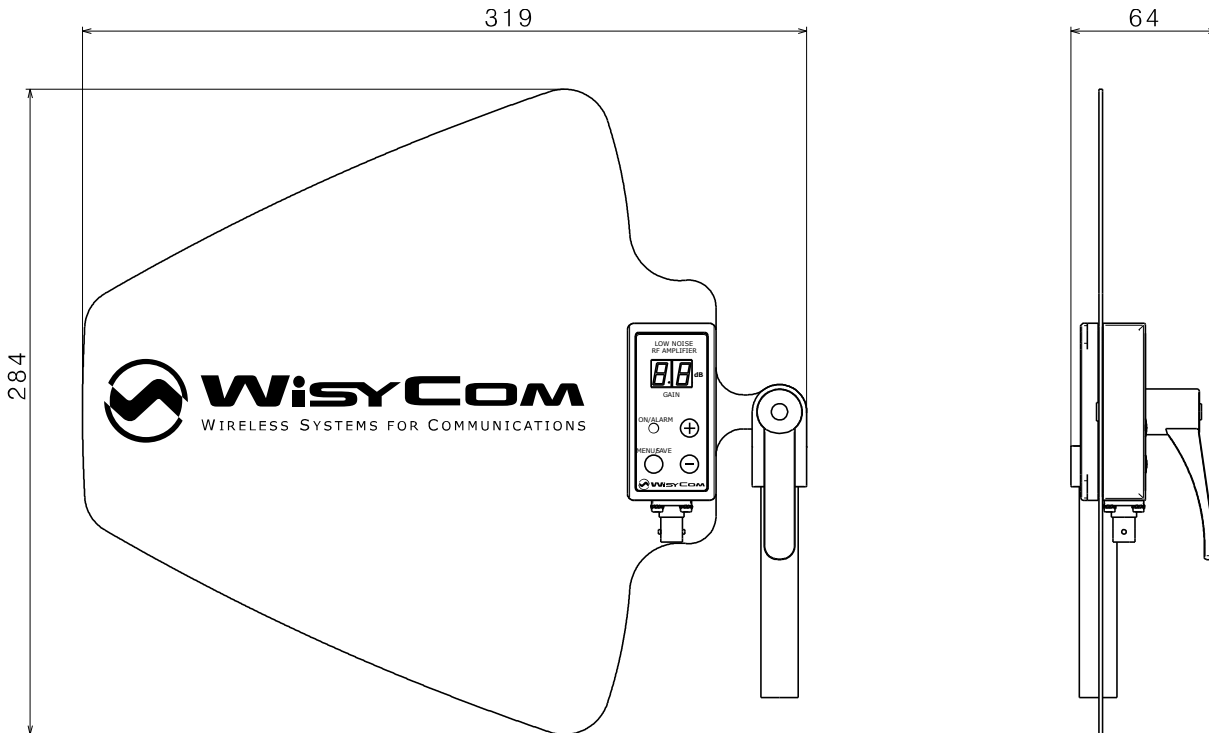
- Push **MENU/SAVE** to enter gain edit mode,
- Then edit the gain with + / - ,
- Push again **MENU/SAVE** for confirm or wait 5 sec to return without saving.

It is possible to setup the gain between 1 ÷ 15 dB in steps of 1dB. Decreasing gain to the lowest value, "bP" is displayed: booster is bypassed and antenna operates in a passive way. Confirm the new setup value within 5" by pressing one more time on the MENU/SAVE button. Without any confirmation within 5" the modification is cancelled.

DISPLAY BRIGHTNESS (first digit "d", second digit value from 0 to 8)

- Push **twice MENU/SAVE** to enter brightness edit mode,
- Then setup your desired brightness with + / - ,
- Push again **MENU/SAVE** for confirm or wait 5 sec to return without saving.

Mechanical specifications



- Dimension (LxHxD): 319 mm x 284 mm x 64 mm
- Material : Epoxy fiberglass (copper – clad)
- Finishing : black mat
- Mounting : 5/8" Whitworth or 3/8" with adapter
- Weight : 500g

Booster specifications

- Frequency : ⇒ UHF (470 ÷ 870 MHz).
- Impedance : 50 ohm (SWR = < 1:1.5; tip. = 1:1.4)
- Connectors : BNC type for LBNA / N type for LNNA
- Gain (max) : 0÷15 dB (typical), selectable in steps of 1 dB (+/- button)
- OIP3 : +43 dBm (output 3^o order Intercept Point) typical
- Gain flatness : ± 1 dB, in the whole working window
- Powering : +12 Vdc / 100mA

Typical attenuation of most used coax.cables (for length = 100 m):

Cable type	Diameter (mm)	Attenuation @ 400 MHz	Attenuation @ 900 MHz
RG 58 C/U	4.95	32 dB	52 dB
RG 213 /U	10.3	13 dB	22 dB
RG 218 /U	22.1	7 dB	14 dB
Cellflex - ¼" foam dielectric	8.8	8.4 dB	12.8 dB



Subject to change without notice