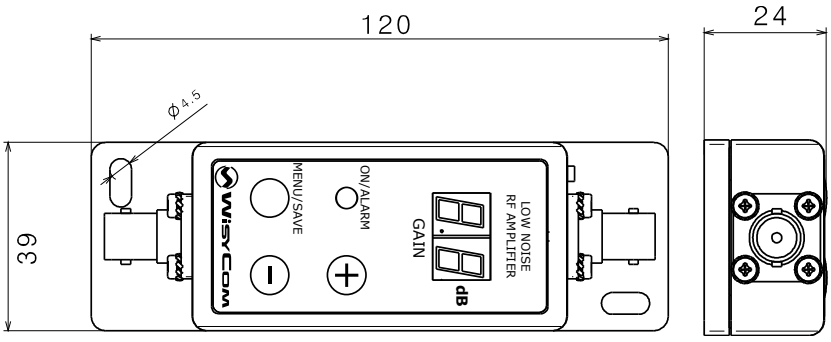
BROADBAND ANTENNA AMPLIFIER



BAA is wideband antenna booster especially designed to allow using long cables with broadband wireless receiver system working in 470-870 MHz (TV chi 21/70) thanks to a very high OIP3 of 40 dBm.

Operation

The BAA is powered by the receiver system through the coaxial cable attached to its output connector, and accordingly the receiver system must have the antenna feeding function.
BEWARE: BAA need 100mA @ 12V to operate and it can feed a further antenna booster up to 100mA @ 12V.

BAA housing is in ruggedized aluminum, with waterproof sealing (suitable for outdoor installations):
⇒ 2 holes for wall-installation (M4 screw type)
Radiofrequency connectors are BNC-Female type:
⇒ ***Input connector***, to antenna. it is possible to power up a remote booster (up to 100mA). When input power is active, "INPUT DC BIAS" led is on. If there is fault on remote booster (i.e. a short circuit) then a L appear on left digit of gain display .
⇒ ***Output connector***, to receiver system. BAA is powered thru this connector (100mA + 100mA if input powering), if there is a fault (low power) a L appear on right digit of gain display .

GAIN SETUP

BAW gain can be setup in 16 steps (0÷15 dB typical) using **+/-** buttons.
A multi-colored (RGB) led will indicate the gain level band and also main alarms.

TECHNICAL SPECIFICATIONS

- Frequency : UHF (470 ÷ 870 MHz)
- Input/output impedance : 50 ohm (SWR = < 1:1.5; typ. = 1:1.4).
- Connectors : BNC-female type
- Max Gain : 16 dB ± 1 dB
- Gain adjustment : selectable in 16 steps of 1 dB (+/- button)
- OIP3 : **+43 dBm (Output 3° order Intercept Point) typical.**
- Gain flatness : ± 1 dB, in the whole working window.
- Powering thru coax : +12 V, 100mA+100mA (→ if power input activated) [MAX: 12V/300mA]
- Size (L x H x P) : 120mm x 39mm x 24mm

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