

### HEAD SAT AMPLIFIER WITH A.B.L.A.

## AMP435SA, AMP435SSA e SWA435SSA



**Head amplifier (AMP)** or **line amplifier (SWA)** with 4 SAT inputs; **output level adjustment** with A.B.L.A. technology (SA and SSA models) and **slope adjustment** (SSA model) for each SAT input

Thanks to **A.B.L.A. technology** (Automatic Building Level Adjustment), the amplifier maintains the set up output level also when input signal power varies

**LEDs A.B.L.A.** turn on when automatic output level adjustment is properly working; if input level is too low, the LED turns off and the product became a common SAT amplifier with maximum gain (36dB) adjustable (20dB)

**External PSU1214** (12V, 1450mA) **included** on AMP packaging, **optional** on SWA models

#### **Mains Specifications**

- Thanks to **A.B.L.A. technology** (Automatic Building Level Adjustment), the amplifier maintains the set up output level also when input signal power varies
- High SAT output level (121dBµV) and optimum inputs isolation (35dB)
- Ideal for **medium and big installation** or where there are long cable drops between the switches
- External PSU1214 (12V, 1450mA) included on AMP packaging, optional on SWA models

- **Remotely fed through SAT lines** 1 (VL), 2 (HL) and 3 (VH) **or using the DC connector** placed on the right side; the same product can thus be used both as **head amplifier** and as **line amplifier**
- HH SAT line DC pass and current pass from DC port to the top and also to the bottom part of the system, short circuit protected and **dip-switch controlled** on the right side of the product
- Double PSU port to offer an higher system strength, with overcurrent protection on DC ports
- Easy to install, thanks to **new adjustment trimmers** and standard colour coding

		AMP435SA ABLA	AMP435SSA ABLA	SWA435SSA ABLA	
Fracarro code		271173	271171	271172	
Input		4 SAT	4 SAT	4 SAT	
Satellite					
Bandwidth	MHz	950-2150	950-2150	950-2150	
Gain	dB	Self adjusted A.B.L.A. 16-36	Self adjusted A.B.L.A. 16-36	Self adjusted A.B.L.A. 16-36	
Input A.B.L.A. level*	dBµV	lt depends on selected output level 65-85 @101dBµV 85-105 @121dBµV	lt depends on selected output level 65-85 @101dBµV 85-105 @121dBµV	lt depends on selected output level 65-85 @101dBµV 85-105 @121dBµV	
Slope	dB	6	15	15	
Slope adjustment	dB	-	15	15	
Return loss	dB	10	10	10	
Output adjustable level*	dBµV	101-121	101-121	101-121	
SAT-SAT isolation	dB	≥35	≥35	≥35	
General characteristics					
Mains voltage	V, Hz	220-240V, 50-60Hz	220-240V, 50-60Hz	11-19V	
Absorption	mA, V	550, 12	550, 12	550, 12	
DC ports voltage	V	11-19	11-19	11–19	
Maximum LNB current	mA	900	900	-	
Maximum SAT current	mA	2000	2000	2000	
Dimensions	mm	160x110x30	160x110x30	160x110x30	
PSU dimensions	mm	145x120x70	145x120x70	Not included	
Operating temperature	О°	-10÷+55	-10÷+55	-10÷+55	

Code	Article	Packaging	Quantity	Dimensions	Single weight	Total weight
			Pieces	mm	kg	kg
271173	AMP435SA ABLA	Single	1	240x185x70	790	810
271171	AMP435SSA ABLA	Single	1	240x185x70	790	810
271172	SWA435SSA ABLA	Single	1	215x125x35	400	415

\*Overall power

-12dB to get single transponder signal power

# A.B.L.A. Technology

INPUT	OUTPUT set up signal*				
signal*	101dBµV	106dBµV	111dBµV	116dBµV	121dBµV
55dBµV	Х	Х	Х	Х	Х
60dBµV	Х	Х	Х	Х	Х
65dBpV	V	Х	Х	Х	Х
70dBµV	V	V	Х	Х	Х
75dBµV	V	V	V	Х	Х
80dBµV	V	V	V	V	Х
85dBµV	V	V	V	V	V
90dBµV	Х	V	V	V	V
95dBµV	Х	Х	V	V	V
100dBµV	Х	Х	Х	V	V
105dBµV	Х	Х	Х	Х	V

AMP435SA, AMP435SSA and SWA435SSA **has A.B.L.A: technology** inside (Automatic Building Level Adjustment); thanks to it, it is possible to **set the output level up** and the amplifier maintains this level also when input signal power varies.

The LED can be used also as **monitoring**, when it is on, input signal level will be **into signal range**; when the LED is off, also if input signal level doesn't respect power requirements to maintain a fixed output level, these products work as **a normal SAT amplifier**, with 36dB gain and 20dB adjustment

\* Overall power

-12dB to get single transponder signal power

Input signal level range varies depending on desired output signal power; to calculate it, it is possible to follow previous table or calculate it with the following formula:

Minimum INPUT signal power = desired OUTPUT signal power – 36 dB Maximum INPUT signal power = desired OUTPUT signal power – 16 dB

## Selectable HEAD and LINE mode

The big difference with previous models concerns the **flexibility with which it is possible to use AMP and SWA both as head amplifiers and as line amplifiers.** 

Thanks to the **dip switch** on the product mechanic side, it is possible to define if the product has to be fed through its **DC-IN ports** or through its **passing SAT lines**; when the PSU is connected to the product, the dip switch can be used to share this voltage **both on input and on output ports**, or decide to feed **only the upper system part**; in this way it isn't necessary to install DC-BLOCKS on output ports to block DC pass through switch cascade.

	MODALITY	WITH PSU	WITHOUT PSU
HEAD	<b>DC is passed</b> with current protection to <b>input ports</b> to feed an LNB and it is blocked to output ports	The amplifier is <b>fed from DC ports</b> and it sends remote power to input ports	The product doesn't work because a PSU is needed, in this case insert a PSU or <b>switch to "LINE" mode</b>
LINE	<b>DC is passed</b> both to <b>input</b> ports and to <b>output</b> ports to feed the entire cascadable system	The amplifier send <b>remote power</b> <b>through entire cascadable system</b> with over current protection, to feed an LNB on input ports and the switches on output ports with only one PSU connected on DC ports	The product is <b>fed by its output ports</b> and it send the remote power to input ports, without current limitation.

The product won't be fed by **HH line**, this SAT port is used **to pass directly the remote power**, without any amplifier current absorption; it can be used **to feed an LNB with a remote PSU**.









