

# TELESTE ACE 2

## 1.2 GHZ INTELLIGENT BROADBAND AMPLIFIER

The ACE2 is a broadband amplifier with one active output with a forward gain up to 44 dB. Based on the latest GaN amplifier technology, the ACE2 offers high output level (U<sub>max</sub> 115 dB $\mu$ V, 112 channels) and supports 1.2 GHz/204 MHz upgrade remotely. Remote control is possible via RIS protocol.



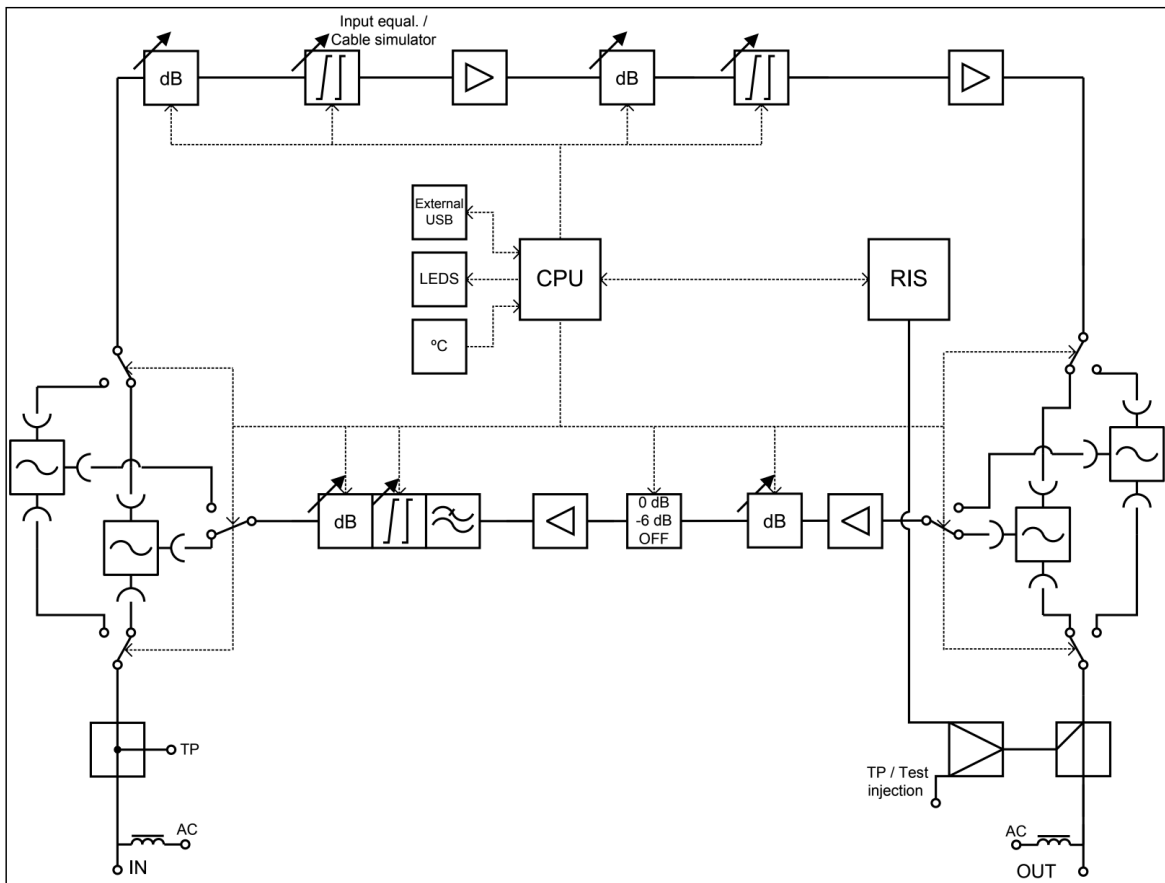
- Remote powering with active PFC
- Intelligent continuous adjustments
- Automatic return path re-alignment
- Local control through an external USB connection
- Intelligent cable simulator at input
- Excellent ESD and surge protection
- Remote ingress switch control
- Remote return path upgrade

## SPECIFICATIONS

DOWNSTREAM SIGNAL PATH (VALUES WITH DIPLEX FILTERS)		
Frequency range	MHz	85...1218
Return loss	dB	18
Maximum gain	dB	44
Gain control	dB	14...44
Input slope control	dB	-13...20
Input cable simulator	dB	-13
Nominal interstage slope	dB	13
Interstage slope control	dB	8...18
Flatness	dB	$\pm 0.5$
Group delay	ns	2
Test point	dB	-20
Transponder connection	dB	-19
Noise figure	dB	8.5
U <sub>max</sub> (112 QAM channels) @ 1.0 GHz	dB $\mu$ V	115.0
U <sub>max</sub> (138 QAM channels) @ 1.2 GHz	dB $\mu$ V	112.0
CTB 41 channels	dB $\mu$ V	118.0
CSO 41 channels	dB $\mu$ V	119.0
UPSTREAM SIGNAL PATH (VALUES WITH DIPLEX FILTERS)		
Frequency range	MHz	5...204
Return loss	dB	18
Maximum gain	dB	28
Ingress switching	dB	0 / -6 / < -40
Gain control	dB	0...28
Slope control	dB	0...15
Flatness	dB	$\pm 0.5$
Noise figure	dB	6.5
RIS RECEIVER		
Downstream frequency range	MHz	115...130 and 245...260
Recommended RIS carrier level at output	dB $\mu$ V	90...105

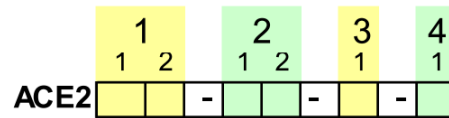
GENERAL		
Power consumption (65 / 230 V AC)	W	24
Supply voltage AC	V	27...65 / 205...255 V
Maximum current feed through	A	7.0 / port
Hum modulation	dB	70
Resistance for remote current	mΩ	25 / port
Input / Output connectors		PG11 (several adaptors available)
Test point connectors		F female
Local service port connector		USB mini-B
Dimensions (h x w x d)	mm	170 (200) x 230 x 90
Weight	kg	2.3
Operating temperature	°C	-40...+55
Class of enclosure		IP 54
Environmental (salt mist, cyclic)		IEC 60068-2-52, severity 1
Safety		EN60728-11 / EN60065
EMC		EN50083-2
ESD	kV	4
Surge	kV	6 (EN 60728-3)

## BLOCK DIAGRAM



## ORDERING INFORMATION

### ACE2 configuration map



<b>1- 1 Gain and housing</b>	
A	44 dB amplifier
<b>1- 2 Power supply</b>	
A	Local powering, euro plug (230 VAC)
B	Remote powering with cable clamp (65 VAC)
C	Local powering, UK plug (230 VAC)
<b>2- 1 Input connection (first from left)</b>	
A	PG11
B	5/8"
C	IEC
D	3.5/12
E	F
<b>2- 2 Output 1 connection (first from right)</b>	
A	PG11
B	5/8"
C	IEC
D	3.5/12
E	F
<b>3- 1 Diplexers</b>	
A	2 x CXF065 + 2 x CXF204
B	2 x CXF065
C	2 x CXF204
D	2 x CXF085 + 2 x CXF204
E	2 x CXF085
X	None
<b>4- 1 Customer specific selections</b>	
X	None

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