



Coaxsim



204 MHz



1218 MHz



GaN

CX series

CX3 1.2 GHz UNIVERSAL AMPLIFIER

Teleste CX3 is the latest addition in our extensive range of DOCSIS® 3.1 capable small amplifiers. Designed quality and robustness in mind, the CX3 amplifier is not only providing reliable performance, but also ensuring great usability. All this comes in a compact format, making it a great all-around amplifier for modern bidirectional networks where cost efficiency and easy installation are prime concerns.

The CX3 is a compact dual output amplifier, amplifier with 1.2 GHz frequency range in the downstream and up to 204 MHz in the upstream. The amplifier stages of CX3 are based on a high-performance GaN solution which gives excellent CTB and CSO performance and ensures low power consumption. Adjustments are based on proven technology using electronical controls, thus eliminating the need for the usual plug-in attenuators or equalizers in system setup. The CX3 amplifier combines the advantages of two gain modes and two slope modes making this amplifier universal. With housing protection class of IP67, the CX3 amplifier is designed for use in demanding environments.

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CX3

1.2 GHZ UNIVERSAL AMPLIFIER

The CX3 is a compact dual output amplifier. Based on the latest GaN amplifier technology, the CX3 offers high output level (U_{max} 110 dB μ V, 138 channels) and wide gain range, both helpful when networks take the next step and become DOCSIS 3.1 compliant.

Simple and reliable

CX3 is a robust, well performing 1.2 GHz all-around amplifier, intended for operators who appreciate high performance, cost efficiency and easy installation.

Local user interface

CX3 has a local user interface consisting of a four digit 7-segment display and three push buttons.

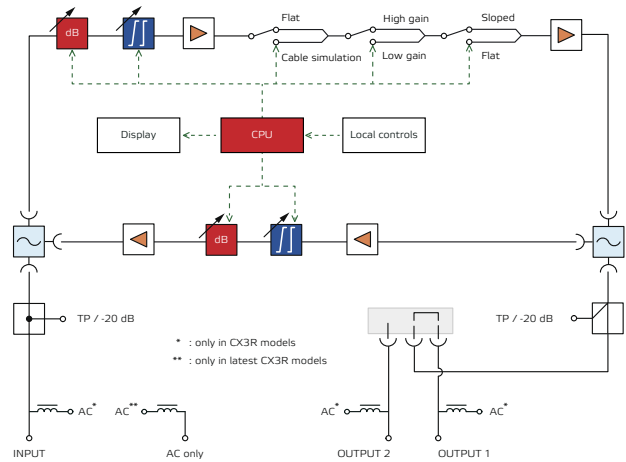
Standard configurations

- **CX3Lxxx** is equipped with 230 V AC power supply with euro plug, 2 x CXDxxx diplex filters installed, 2 x F-female adapters installed, 1 x 5/8" sealing adapter installed, the package includes also 1 x F female and 1 x CXM4 splitter module.
- **CX3Rxxx** is equipped with 65 V AC power supply with euro plug, 2 x CXDxxx diplex filters installed, 2 x 5/8" sealing adapters installed, the package includes also 1 x CXM4 splitter module.



CX3 features

- 1218 MHz downstream
- 204 MHz upstream
- Electrical adjustments with local user interface
- GaN performance
- Cable simulator selection at input
- High gain/low gain selection
- Flat/sloped output selection
- Excellent ESD and surge protection



CX3 block diagram



Smooth migration

The CX3 amplifier can be used in 860 MHz / 1 GHz / 1.2 GHz networks while the return path supports frequencies up to 65 MHz, 85 MHz and 204 MHz.

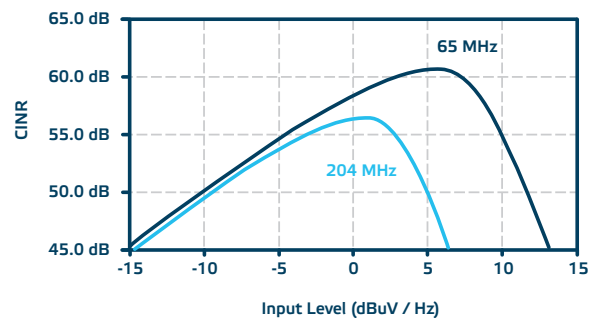
Configurable for one or two outputs when a splitter / tap module is used.

- CXD065 Diplex filter, 65/85 MHz
- CXD085 Diplex filter, 85/105 MHz
- CXD204 Diplex filter, 204/258 MHz
- CXM4 Output splitter module
- CXM8 Tap module, 8 dB
- CXM14 Tap module, 14 dB

CX3 / 1.2 GHZ UNIVERSAL AMPLIFIER

DOWNSTREAM SIGNAL PATH (all values with diplex filters, 0 dB output plug)		UPSTREAM SIGNAL PATH (all values with diplex filters)	
Frequency range	85...1218 MHz	Frequency range	5...204 MHz
Return loss	18 dB	Return loss	18 dB
Gain	43 dB	Gain	28 dB
Input attenuator control range	0...-20 dB	Gain control range (output)	0...-20 dB
Input equaliser control range	0...20 dB	Slope control range	0...15 dB
Cable simulator	0 / -13 dB	Flatness	± 0.5 dB
Mid-stage slope	13 / 0 dB	Noise figure (@ high gain)	< 6.5 dB
Mid-stage gain selection	43 dB / 35 dB	CINR	See curves
Flatness	± 0.5 dB		
Group delay	2 ns		
Test point	-20 dB		
Noise figure @ 1218 MHz, flat, high gain	< 9 dB		
Noise figure @ 1218 MHz, flat, low gain	< 10 dB		
Umax (138 QAM channels, @ 1.2 GHz)	> 110.0 dBµV (10/2020)		
CTB 41 channels	> 116.0 dBµV		
CSO 41 channels	> 117.0 dBµV		
GENERAL			
Supply voltage	180...255 V AC / 28...65 V AC	Weight	2.1 kg
Power consumption	18 W	Operating temperature	-40...+55 °C
Max current feedthrough	7 A	Class of enclosure	IP67
Hum modulation	65 dB/5 A	EMC compatibility	EN 60728-2
Input / Output connectors	F-female / 5/8"	Safety	EN60728-11
Test point connector	F-male	ESD	2 kV
Dimensions (h x w x d)	220 mm x 210 mm x 80 mm	Surge	6 kV (EN 60728-3)

CINR. Full digital load. 65 MHz (5 x 6.9 Msym/s) and 204 MHz (23 x 6.9 MSym/s).



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TELESTE CORPORATION
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