



CX4R204DG - 1794/204 MHz

DISTRIBUTION  
AMPLIFIERS

## CX4R-D and CX4R-DG

The CX4R is a compact amplifier and the amplifier stages are based on extremely high performance GaN solution that makes the usable gain range especially wide and allows high output level. Alignment can be made using electrical circuits that are controlled with push buttons. A fixed high gain return amplifier circuit is fixed on the motherboard. The amplifiers are remote powered. In addition to RF ports, power can also be supplied through a separate connector at the side of the PSU. It also features a bypass port next to the input port. The amplifier comes in two variants, one is a group amplifier CX4R-DG and another is an end amplifier CX4R-D.

### CX4R-D and CX4R-DG features:

- 1.8 GHz forward path
- Up to 492 MHz return path
- Push buttons and a display for easy alignment
- Return Follows Forward
- Remote Ingress Switching
- Power Save mode
- Cable Simulator
- Bypass port at input

**TELEESTE**

## DISTRIBUTION AMPLIFIERS / CX4R-D AND CX4R-DG

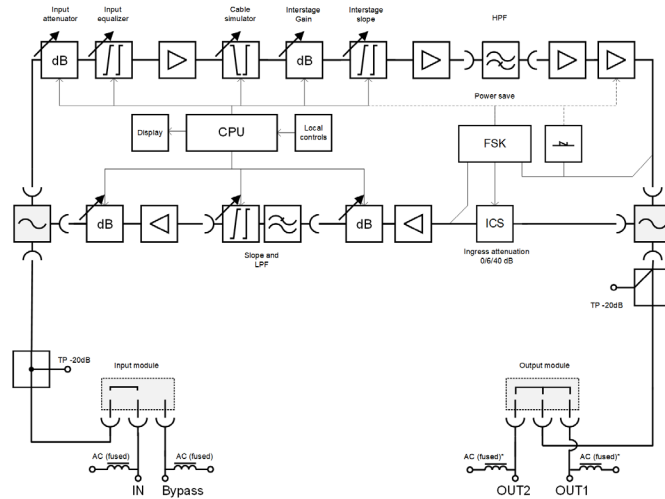
TECHNICAL SPECIFICATIONS <sup>(1)</sup>			
Downstream signal path		Upstream signal path	
Gain	51 dB <sup>(2)</sup>	Gain	32 dB <sup>(2)</sup>
Frequency range	258...1794 MHz	Frequency range	5...492 MHz
Return loss	≥ 18 dB <sup>(3)</sup>	Return loss	≥ 18 dB
Input attenuator	0...20 dB <sup>(4)</sup>	Output attenuator	0...20 dB <sup>(4)</sup>
Input equalizer	0...24 dB <sup>(4)</sup>	Interstage attenuator	0...20 dB <sup>(4)</sup>
Cable simulator	0 dB/15 dB	Equalizer	0...20 dB <sup>(4)</sup>
Interstage attenuator	0...20 dB <sup>(4)</sup>	Ingress Control Switches	0 dB/-6 dB/-45 dB <sup>(6)</sup>
Interstage equalizer	0...20 dB <sup>(4)</sup>	Flatness	±1 dB <sup>(5)</sup>
Flatness	±1 dB <sup>(5)</sup>	Noise figure	9 dB
Noise figure	9 dB	Total Composite Power	61 dBmV
Total Composite Power	68 dBmV		
GENERAL SPECIFICATIONS			
Connectors	Input and output: 5/8" threads Test points: F connector		
Test points	20 dB input and output		
Impedance	75 Ω	Operating temperature	-20...+65 °C
Power supply	30...90 VAC	Class of enclosure	IP67
Power consumption	< 25W	Safety	EN/IEC 60728-11
Housing	Die-cast Zinc or Aluminum	EMC	EN 50083-2
Dimensions	25 x 21 x 11 cm (w x h x d)	ESD	2 kV
Weight	2 kg	Surge	2 kV

# DISTRIBUTION AMPLIFIERS / CX4R-D AND CX4R-DG

## NOTES

- (1) Typical values.
- (2) Nominal gain in room temperature.
- (3) The limiting curve is defined at 204 MHz -1.5 dB / octave. Return loss is always > 13 dB.
- (4) Electronic circuit with 0.5 dB step size.
- (5) Over the entire temperature range.
- (6) Ingress switching requires an optional module.

## BLOCK DIAGRAM



## ORDERING INFORMATION

<b>CX4R204D</b>	End amplifier, 2 x 204/258 MHz diplexers, upstream 204 MHz module, downstream 258 MHz module, 0 dB input module, output splitter module, 3A fuse at input port, 2 x IECM14 5/8" adapter, 5/8" plug at bypass port.
<b>CX4R396D</b> <b>CX4R492D</b>	Same as CX4R204D but with 396/492 MHz diplex filters and upstream and downstream modules. Same as CX4R204D but with 492/606 MHz diplex filters and upstream and downstream modules.
<b>CX4R204DG</b>	Group amplifier, 2 x 204/258 MHz diplexers, upstream 204 MHz module, downstream 258 MHz module, 0 dB input module, output splitter module, 10 A fuses at input and output ports, IECM 14 5/8" adapter, 5/8" plug at bypass port.
<b>CX4R396DG</b> <b>CX4R492DG</b>	Same as CX4R204DG but with 396/492 MHz diplex filters and upstream and downstream modules. Same as CX4R204DG but with 492/606 MHz diplex filters and upstream and downstream modules.

## OPTIONAL ACCESSORIES

<b>204/258 MHz kit</b>	2 x diplexer 204/258 MHz, upstream module 204 MHz and downstream module 258 MHz
<b>396/492 MHz kit</b>	2 x diplexer 396/492 MHz, upstream module 396 MHz and downstream module 492 MHz
<b>492/606 MHz kit</b>	2 x diplexer 492/606 MHz, upstream module 492 MHz and downstream module 606 MHz
<b>CXM1E</b>	Minimum loss input/output module
<b>CXM5E</b>	Splitter input/output module
<b>CXM8E</b>	8 dB tap input/output module
<b>CXM14E</b>	14 dB tap input/output module
<b>CXT series</b>	Remote control modules, please contact us for more details.



**TELESTE CORPORATION**  
[www.teleste.com](http://www.teleste.com)

Trunk and Distribution Amplifier CX4\_240506

Copyright © 2024 Teleste Corporation. All rights reserved. Teleste and the Teleste logo are registered trademarks of Teleste Corporation. Other product and service marks are property of their respective owners. Teleste reserves the right to make changes to any features and specifications of the products without prior notice. Although the information in this document has been reproduced in good faith, the contents of this document are provided "as is". Teleste makes no warranties of any kind in relation to the accuracy, reliability or contents of this document, except as required by applicable law.