



PRODUCT FAMILY	DESCRIPTION
OUTDOOR PASSIVES	REPEATER AMPLIFIER WITH AN EQUALIZER
FEATURES	
	<ul style="list-style-type: none"> >> Plug-in diplex filters >> Fixed slope equalization >> High performance GaAs Push Pull amplifier >> Efficient surge and ESD protection >> Downstream is D3.1 (1.2 GHz) compatible and the device can be upgraded to support D3.1 (204MHz) upstream >> Supports high feed through current >> JDA9xx series plug-in attenuator slot in Return Path >> Connectors on both sides and on top >> No adjustments needed

DOWNSTREAM SIGNAL PATH (values with diplex filter)

Frequency range	85 / 105 / 258 – 1218 MHz
Return loss	18 dB ⁽¹⁾
Gain	12.75 dB +/- 0.75 dB ⁽²⁾
Fixed input equalization	10 dB ⁽³⁾
Flatness	+/- 0.75 dB
Test point	- 20 dB ⁽⁴⁾
Noise figure	@85 MHz @1218 MHz < 18 dB < 7 dB
Umax (112 QAM channels)	99.0 dBuV ⁽⁵⁾
CTB 41 channels	105.0 dBμV ⁽⁶⁾
CSO 41 channels	105.0 dBμV ⁽⁶⁾
XMOD 41 channels	101.0 dBμV ⁽⁶⁾
CTB mixed raster	> 85 dB ⁽⁷⁾
CSO mixed raster	> 85 dB ⁽⁷⁾
Input level	@85 MHz @1218 MHz 75 - 93 dBuV 68 - 85 dBuV

Teleste reserves the rights to alter specifications, features, manufacturing release dates and even the general availability of the product at any time.

UPSTREAM SIGNAL PATH (values with diplex filter)

Frequency range	5 - 65/85/204 MHz
Return loss	18 dB ⁽¹⁾
Insertion loss	3 dB ⁽⁸⁾

GENERAL SPECIFICATIONS

Power consumption	3.3 W
Supply voltage	27 - 65 Vac
Maximum-feed through current	7.0 A / port
Hum modulation	70 dB ⁽⁹⁾
Resistance for remote current	30 mΩ / port
Connectors	Input/Output Test point 5/8" F female
Dimensions	h x w x d 16 x 14 x 8 cm
Weight	1 kg
Operating temperature	-40 ... +60 °C
Class of enclosure	IP65
EMC	EN50083-2
ESD	4 kV ⁽¹⁰⁾
Surge protection	6 kV (EN60728-3)

Notes

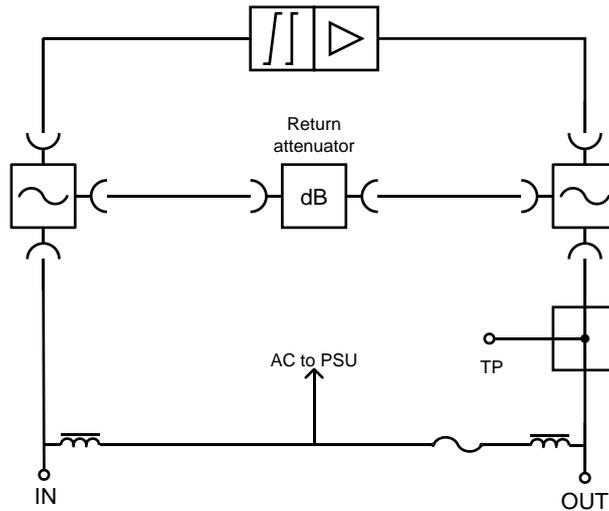
- (1) The limiting curve is defined at 85 MHz -1.5 dB / octave.
- (2) The nominal operational gain at 1218 MHz. It is defined with 2 pcs of diplex filters.
- (3) 85...1218 MHz.
- (4) This bidirectional TP located at output is **primarily** intended for monitoring RE100 downstream path but can be used as a 20 dB injection point for return path.
- (5) Typical value according to IEC60728-3-1 **with** sloped output. BER measurement has been done on the worst channel between 110...862 MHz.
- (6) EN50083-3 **with** sloped output. All results are typical values in room temperature. XMOD is measured at the lowest channel. Guaranteed values are 2 dB lower.
- (7) Channel raster has 23 PAL + 91 QAM (-6 dB) channels. Sloped output. Equivalent level is 95 dBuV at 1218 MHz. Guaranteed values are 2 dB lower (in distortion).
- (8) At 65 MHz. In the case of 204 MHz US loss is -4 dB.
- (9) At any frequency from 10 to 862 MHz when the remote current is less than 7 A. 65dB at any frequency from 862 to 1218 MHz. Value is for one port.
- (10) EN61000-4-2, contact discharge to enclosure and RF-ports.

RE100 is a high performance GaAs Push Pull repeater amplifier. It is used on distribution lines when the networks are upgraded to higher frequency band. It compensates increased cable loss.

RE100 can also act as a line equalizer.

The operational window of the amplifiers input level is wide and no level adjustments are needed

BLOCK DIAGRAM



MOUNTING POSSIBILITIES

3 ways of mounting:

- Fixed mounting blocks on the sides
- Mounting brackets can be used
- Wire mounting



ORDERING INFORMATION

- RE100** Repeater amplifier, 5-1218 MHz, 10dB slope with 2 x **CXF065** Diplex filters (slip-band 65/85 MHz)
- RE100-MXF065** Repeater amplifier, 5-1218 MHz, 10dB slope with 2 x **MXF065** Diplex filters (slip-band 65/85 MHz)

Plug-ins

1. **Diplexers:** MXF065, MXF204
CXF065, CXF204: Teleste standard plug-in
2. **Attenuators:** JDA901-920 (1dB-20dB, step 1dB)