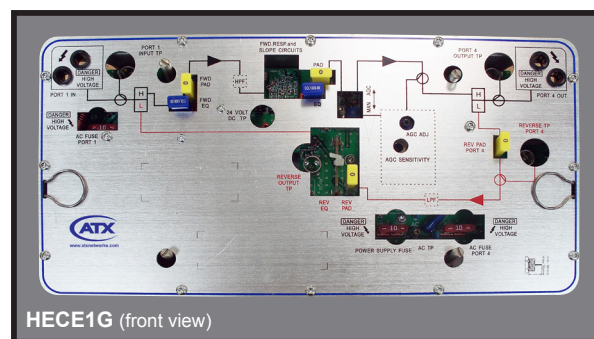


C-Cor HECE1G 1 GHz Line Extender:

Features & Benefits:

- ▶ 1 GHz drop-in upgrade for 750 MHz C-Cor 900 series Line Extenders
- ▶ 1 GHz enables providers to economically increase forward capacity for addition of new services
- ▶ Save time & money with drop-in upgrades vs complete LE swap & resplice
- ▶ Enables reuse of legacy line extender housings & power supplies
- ▶ GaN options for twice as much RF output power as legacy GaAs solutions
- ▶ GaN options for same RF output power as legacy GaAs solution, but at less wattage = lower OPEX. The "Green" solution
- ▶ Automatic Gain Control (AGC) & Manual Gain Control (MGC) models available
- ▶ Now with QAM AGC option to reclaim valuable spectrum
- ▶ High performance return amplifier
- ▶ Capable of handling up to 15A of AC through-current

DISCONTINUED



HECE1G 1 GHz Line Extender Specifications

SPECIFICATIONS		MANUAL GAIN CONTROL	AUTOMATIC GAIN CONTROL	RETURN AMPLIFIER
BANDWIDTH		54-1002 MHz		5-42 MHz
SLOPE	54-1002 MHz	15 dB		n/a
	54-550 MHz	7 dB		
FLATNESS		+/- 0.75 dB		+/- 0.5 dB
OPERATIONAL GAIN, dB @ 1 GHz ⁽¹⁾		See Options (36-39 dB)	See Options (33-36 dB)	18 dB
LE OUTPUT LEVEL, GaAs & HE GaN ^(2,4)		44/37 dBmV @ 550/54 MHz (Analog) 45/38 dBmV @ 1000/550 MHz (QAM)		n/a
LE OUTPUT LEVEL, GaN ^(2,4)		47/40 dBmV @ 550/54 MHz (Analog) 48/41 dBmV @ 1000/550 MHz (QAM)		n/a
CTB/CSO, -dBc ⁽²⁾		73/74		69/70
NOISE FIGURE		See Options (-6 dB + input loss)		4 dB
RETURN LOSS		16 dB		16 dB
AC CURRENT PASSING		15 Amps		n/a
AC CURRENT @ 60V ⁽³⁾		470mA	480mA	n/a
AC CURRENT @ 90V ⁽³⁾		370mA	380mA	n/a
AGC CONTROL RANGE		n/a	-3 to 0 dB	n/a
AGC CONTROL ACCURACY -40°C to +60°C (-40°F to +140°F)		n/a	+/- 1	n/a
PILOT FREQUENCY (Recommended)		439.25 MHz (specify other at time of order)		n/a
OPERATING TEMPERATURE		-40°C to +60°C (-40°F to +140°F)		
HUMIDITY		20-55% (without condensation, inside housing)		
DIMENSIONS		7.0"H x 13.5"W x 2.0"D (17.8H x 34.3W x 5.1D cm)		
WEIGHT		3.8 lbs (1.74 kg)		
NOTES:				
(1) All Operational gains specified with 0 dB pads and either 15 dB forward slope or 0 dB return slope where applicable. Specified as peak gain at highest rated frequency (1 GHz).				
(2) Based on output of 79 Analog channels 54-550 MHz, 75 QAM Channels 550-1000 MHz @ -6 dB. Tilted output level with Analog level of 44/37 dBmV at 550/54 MHz.				
(3) See options for GaN output power savings of up to 2W (-33mA @ 60 VDC, -22mA @ 90 VDC).				
(4) The HE (high efficiency, part number code "N") version of GaN output has same RF output rating as GaAs device. The advantage is in the almost 2W of power savings.				
Specifications subject to change without notice.				

C-Cor HECE1G 1 GHz Line Extender:**Ordering Information for C-Cor Compatible LE Upgrades**

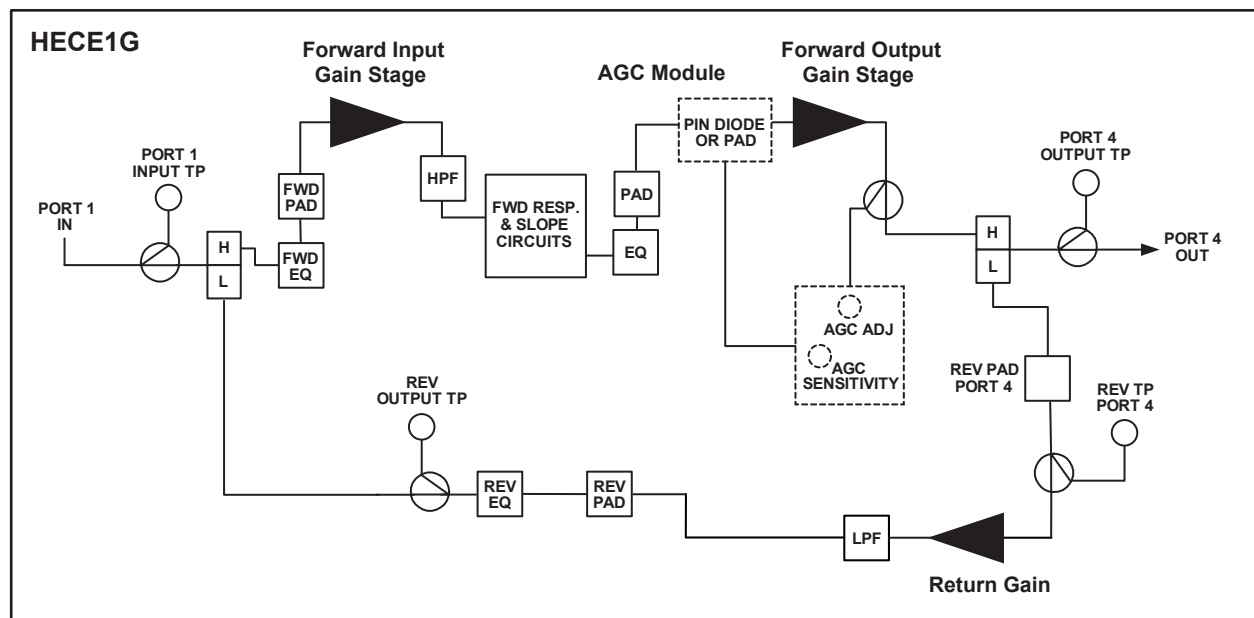
Example Part Number: HECE1G - $\frac{L}{1}$ - $\frac{N}{2}$ - $\frac{M}{3}$					
1. FORWARD INPUT GAIN					
Forward Input Gain Stage (GaAs)					
Part Number Code	dB Net Gain	NF	Wattage	Min. An Input (QAM @ -6 dB)	Advantage
L	18.0	6.2 dB	6W	10 dBmV/Ch	--
2. FORWARD OUTPUT GAIN					
Forward Output Gain Stage (GaAs/GaN)					
Part Number Code	dB Net Gain	Wattage	Max. An Output @550M (QAM @ -6 dB)	Tech	Advantage
L	18.0	11W	44 dBmV	GaAs	--
N	18.0	9W	44 dBmV	GaN	2W Less Power
H	21.0	11W	47 dBmV	GaN	+3 dB Gain, High Output/Ch
3. AGC OPTION: M = MGC A = AGC with Analog/CW Pilot Q = AGC with Digital/QAM Pilot					
AGC Module					
Part Number Code	Mode	AGC Range			
M	MGC	0 dB			
A	Analog AGC	+/-3 dB			
Q	QAM AGC	+/-3 dB			

Common Part Number Combinations

Part Number	Description
Drop-in Upgrades	
HECE1G-L-L-M	GaAs, +36 dB, MGC
HECE1G-L-L-A	GaAs, +33 dB, Analog AGC
HECE1G-L-L-Q	GaAs, +33 dB, QAM AGC
HECE1G-L-N-M	HE GaN Out, +36 dB, MGC
HECE1G-L-N-A	HE GaN Out, +33 dB, Analog AGC
HECE1G-L-N-Q	HE GaN Out, +33 dB, QAM AGC
HECE1G-L-H-M	High Gain/Power GaN, +39 dB, MGC
HECE1G-L-H-A	High Gain/Power GaN, +36 dB, Analog AGC
HECE1G-L-H-Q	High Gain/Power GaN, +36 dB, QAM AGC
NOTE:	
Always Specify Pilot Channel or Frequency at Time of Order for AGC	
Accessories	
JXP-GM-XX	Forward & Return Pads/Attenuators (XX = 0-20 dB in increments of 1 dB)
JXPEQC-XX	Forward EQ (XX = 0-20 dB in increments of 1 dB)
HECE1G-QAM	Additional QAM AGC Module Plug-in

C-Cor HECE1G 1 GHz Line Extender:

Functional Schematic



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