

ACION 8000 Series A8KFT3 – 1310 nm Forward Transmitter

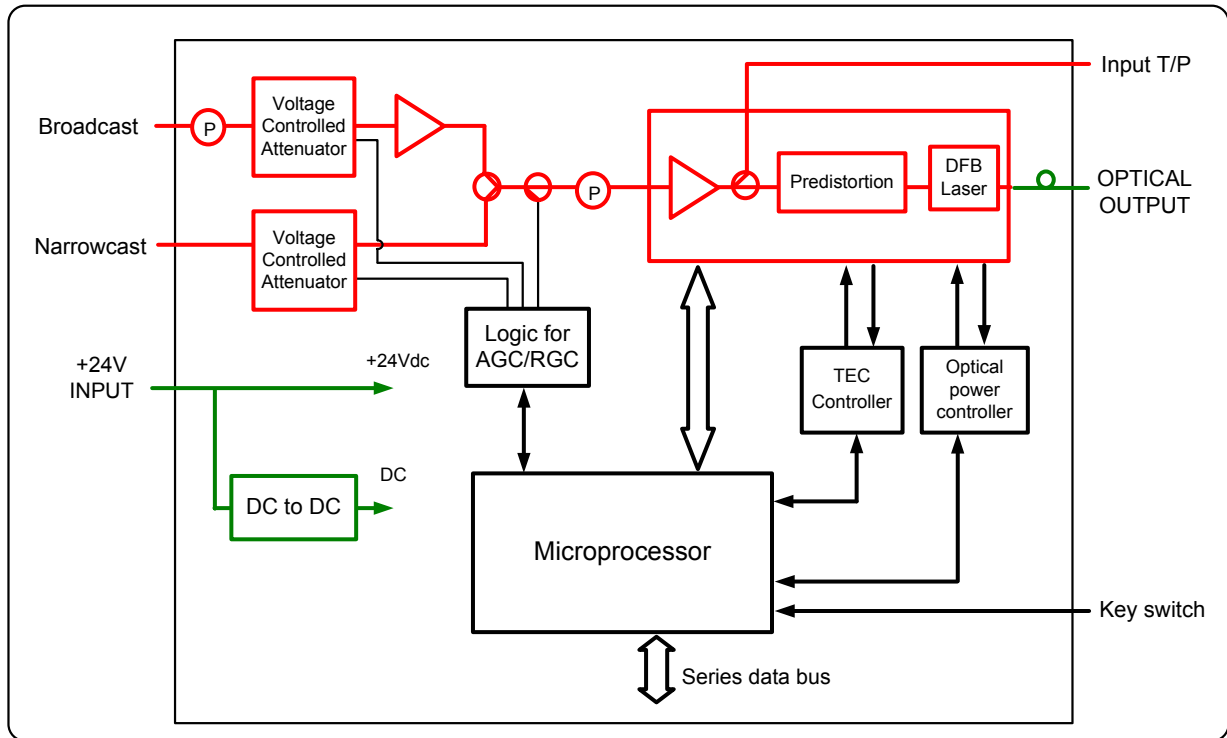


A8KFT3 – 1310 nm Forward Transmitter module is 3RU in height and up to 12 modules can reside in the 19-inch high-density chassis (A8KMF3).

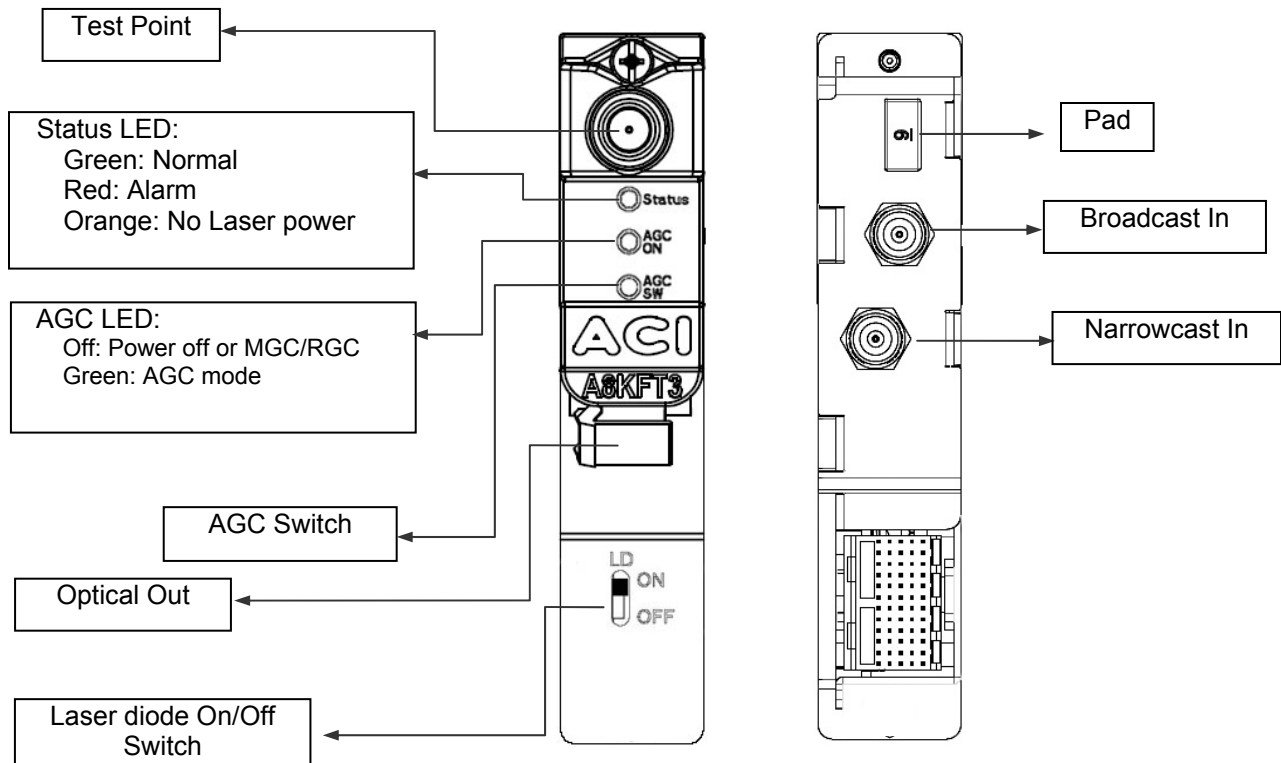
Features

- Up to 1002 MHz transmission bandwidth
- Cooled DFB laser diode with isolator
- 1310 nm optical wavelength
- Plug-in JXP attenuator pads for RF gain control
- Hot-swappable
- Remote monitor and control function by HMS or SNMP
- RF front-panel test point
- SC/APC with shutter (standard), FC/APC, or E2000/APC (optional) connector types

A8KFT3 – 1310 Forward Transmitter Block Diagram



Front /Rear View



Specifications

ACI Communications, Inc.			ACION 8000 Series A8KFT3 - 1310 nm Forward Transmitter	
PARAMETERS	CONDITIONS	UNITS	SPECIFICATIONS	NOTES
Optical Specifications				
Laser type			Cooled DFB with isolator	
Optical wavelength		nm	1310 ±10	
Connector type			SC/APC (standard) FC/APC, E2000/APC (optional)	
Optical power		dBm	Standard: 3, 6, 10, 13 Optional: 4, 5, 7, 8, 9, 11, 12	
RF Parameters				
Operating bandwidth		MHz	50 to 1002	
Channel loading	NTSC		79 NTSC channels 75 Digital QAM channels	
RF input return loss	Worst Case	-dB	18.0	
Broadcast RF input level (Analog channels)	AGC mode	dBmV/ch	11 to 19	
	MGC mode	dBmV/ch	15 (79 NTSC loading)	
Narrowcast RF Input Level (Digital QAM channels)	AGC mode	dBmV/ch	26 to 34	
	MGC mode	dBmV/ch	30 (QAM carriers @ -6 dBc)	
Remote gain control range	RGC mode	dB	-4.0 to +4.0	
Flatness (Peak-to-Valley)	50 to 1002 MHz	±dB	0.5	
Test point		±dB	0.5	
Port-to-Port isolation (Narrowcast to Broadcast Inputs)		dB	50.0	
Distortion Performance				
Composite Second Order (CSO)	Max	-dBc	65.0	
Composite Triple Beat (CTB)	Max	-dBc	70.0	
Cross-Modulation (XMOD)		-dBc	65.0	
Electrical/Environmental/Mechanical				
RF connector type	Rear panel		F type female	
Module width		slot	1	
Dimensions	D × H × W	in. (mm)	16.1 X 5.0 x 1.0 (410 X 127 x 26)	
Operating temperature		°F (°C)	32 to 122 (0 to 50)	
Storage temperature		°F (°C)	-40 to 149 (-40 to 65)	
Relative humidity	Non-condensing	%	0 to 95	
Power consumption	Max	W	15.6	

Confidential

information contained in this document is subject to change without notice.

Revision date: 12/12/2008

Performance Specifications

Carrier-to-Noise

Model #	Output Power	Total Optical Link Loss (dB)														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A8KFT3-03-XX	3-4 dBm	54.0	53.0	52.0	51.0	50.0										
A8KFT3-04-XX	4-5 dBm		54.0	53.0	52.0	51.0	50.0									
A8KFT3-05-XX	5-6 dBm			54.0	53.0	52.0	51.0	50.0								
A8KFT3-06-XX	6-7 dBm				54.0	53.0	52.0	51.0	50.0							
A8KFT3-07-XX	7-8 dBm					54.0	53.0	52.0	51.0	50.0						
A8KFT3-08-XX	8-9 dBm						54.0	53.0	52.0	51.0	50.0					
A8KFT3-09-XX	9-10 dBm							53.5	52.5	51.5	50.5	49.5				
A8KFT3-10-XX	10-11 dBm								53.5	52.5	51.5	50.5	49.5			
A8KFT3-11-XX	11-12 dBm									53.0	52.0	51.0	50.0	49.0		
A8KFT3-12-XX	12-13 dBm										53.0	52.0	51.0	50.0	49.0	
A8KFT3-13-XX	13-14 dBm											53.0	52.0	51.0	50.0	49.0

Note: CNR numbers based on 79 channels NTSC +75 MHz digital channel loading, OMI 3.2%

Ordering Matrix

A8KFT3 Configuration Sheet

Customer: _____

Created By: _____ Order Date: _____

ORDERING MATRIX
May 24, 2007

Position	—	1	2	3	4	5
A8KFT3	—			—		

1, 2

0	3
0	4
0	5
0	6
0	7
0	8
0	9
1	0
1	1
1	2
1	3

Output Power

= 3 dBm (Standard)

= 4 dBm

= 5 dBm

= 6 dBm (Standard)

= 7 dBm

= 8 dBm

= 9 dBm

= 10 dBm (Standard)

= 11 dBm

= 12 dBm

= 13 dBm (Standard)

4, 5

S	C
F	C
E	2

Connector

= SC/APC with shutter (Standard)

= FC/APC (Optional)

= E2000/APC (Optional)

