



## ACION 8000 Series

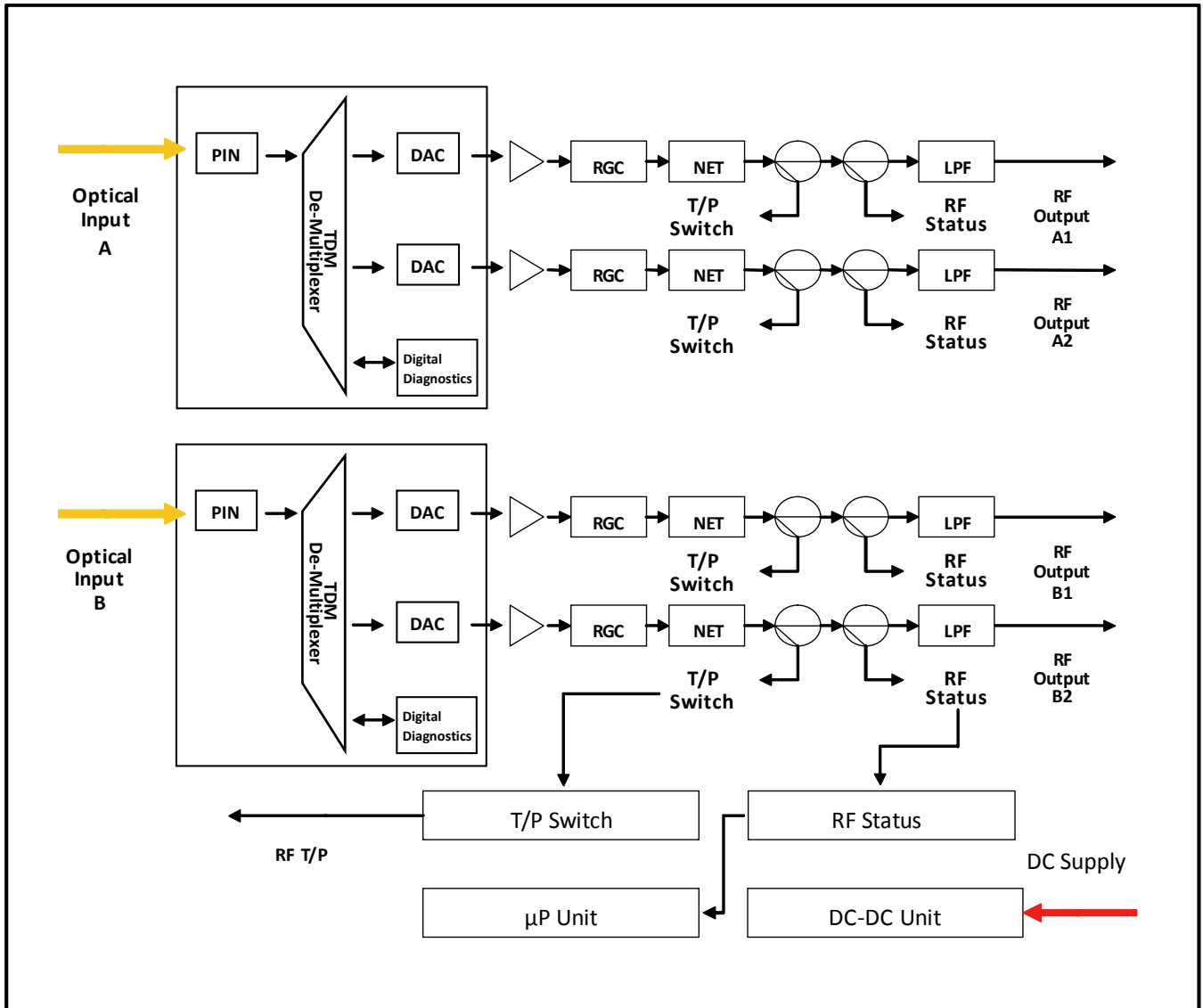
### A8KQDR - Quad Digital Return Receiver

A8KQDR – Quad Digital Return Receiver is an integral part of return path system applications. 3RU in height and up to 12 modules can reside in the 19-inch high-density chassis (A8KMF3).

#### Features

- 1U 19" rack housing
- Wide optical input range
- 4 Return optical inputs and 4 Return RF outputs (A8KQRR)
- Maximum of 48 returns for Quad receiver modules per chassis
- Wide optical input range
- Front optical inputs and rear RF outputs
- Optical wavelength: 1260 to 1620 nm
- Hot-swappable
- Remote monitor and control function by HMS or SNMP

# Block Diagram



# Specifications

ACI		ACION 8000 Series A8KQDR Quad Digital Return Receiver		
PARAMETERS	CONDITIONS	UNITS	SPECIFICATION	NOTES
Optical Specification				
Optical receive power		dBm	-18 ~ -5	
Wavelength		nm	1260 to 1620	
RF Specifications				
Impedance		Ω	75	
Return loss	Min.	dB	-16 @ 5 - 45 MHz	
Output level	Min.	dBmV	36	
RF gain adjustment	RGC Mode Range	dB	0 to 20	
Operating bandwidth		MHz	5 to 42	
Flatness	Peak to Valley	dB	± 1.0	Link
Slope		dB	-3	Link
Test point	Directional coupler	dB	-20 ± 0.5	
RF gain		dB	10.5	Note 1
Receiver to receiver isolation	5 to 45 MHz	dB	< -50	
Distortion				
Equivalent noise input	Max.	Pa/Hz <sup>0.5</sup>	7	
Second order distortion	Max.	dBc	-54	Link
Third order distortion	Max.	dBc	-62	Link
Environment				
Module width		slot	1	
Power consumption	Max.	W	15.0	
Operating temperature		°F (°C)	32 to 122 (0 to 50)	
Relative humidity	Non-condensing	%	0 to 95	
Optical connector			SC/APC	
Dimensions	D x H x W	Inch. (mm)	16.1 x 5.0 x 1.0 (410 x 127 x 26)	

Note 1: Measured from input of first gain stage to output of module with minimum attenuation.

# Ordering Matrix

## A8KQDR Configuration Sheet

Customer: \_\_\_\_\_  
 Created By: \_\_\_\_\_ Order Date: \_\_\_\_\_

### ORDERING MATRIX

2016/9/13

	1		2	3	4		5	6	7	8	9
A 8 K		D R	—			—					

1

**Number of Receiver ports in module**

Q = 4 ports (standard)

3~4

**A/B Switch for redundant or not redundant receivers**

00 = Without A/B Switch for Non-redundant receivers

5~6

**Connector**

SC = SC/APC with shutter (standard)

FC = FC/APC

E2 = E2000

7~9

**Digital Return Receiver Module & RF output**

413 = 45MHz, Single PIN Receiver, Dual RF Output (2-fer)

422 = 45MHz, Dual PIN Receiver, Dual RF Output

613 = 65MHz, Single PIN Receiver, Dual RF Output (2-fer)

622 = 65MHz, Dual PIN Receiver, Dual RF Output

811 = 85MHz, Single PIN Receiver, Single RF Output

822 = 85MHz, Dual PIN Receiver, Dual RF Output



ACI Communications, Inc.  
 23307 66th Avenue South  
 Kent, WA 98032

Rev A 09-13-2016 Printed in U.S.A.  
 ACI Communications, Inc. reserves the right to discontinue the manufacture or change specifications without prior notice on any parts illustrated in this data sheet. Registered trademarks are the property of their respective owner