



ACI Communications, Inc. 

ACI ED 5019

Erbium-Doped Fiber
Amplifier

Overview

The ACI ED 5019, is a 1550nm Optical Amplifier, which adopts highly stable pump laser. In long-haul fiber optic systems, optical amplifiers become an essential component. ED 5019 series is just this sort of product that allows information to be transmitted over long distances without conventional repeaters. The fiber is doped with erbium that can amplify the light under appropriate condition. Because ED 5019 series greatly enhances system performance, they are applied in long-haul, high data rate fiber optic communication and CATV transmission systems.

To achieve low noise, high stability and extreme reliability, key components are all of imported famous brand. With high performance to price ratio, it is suitable for large-scale or middle-scale network deployment.

Features

1U 19" rack housing

Full Output Power range from 13 to 23 dBm

High reliability 980/1480 nm pump

1 or 2 port output option

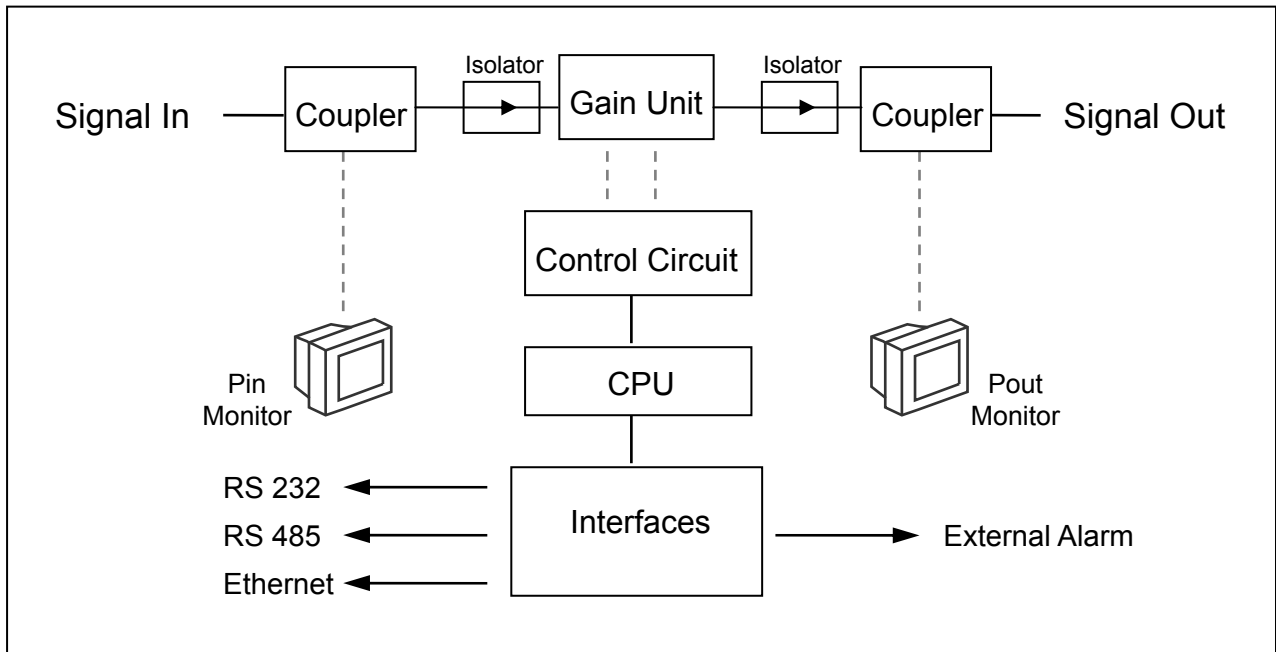
Wide operating range, high gain, low noise figure

RS485 or Ethernet control interface

Advanced heat sink design for pump laser diode

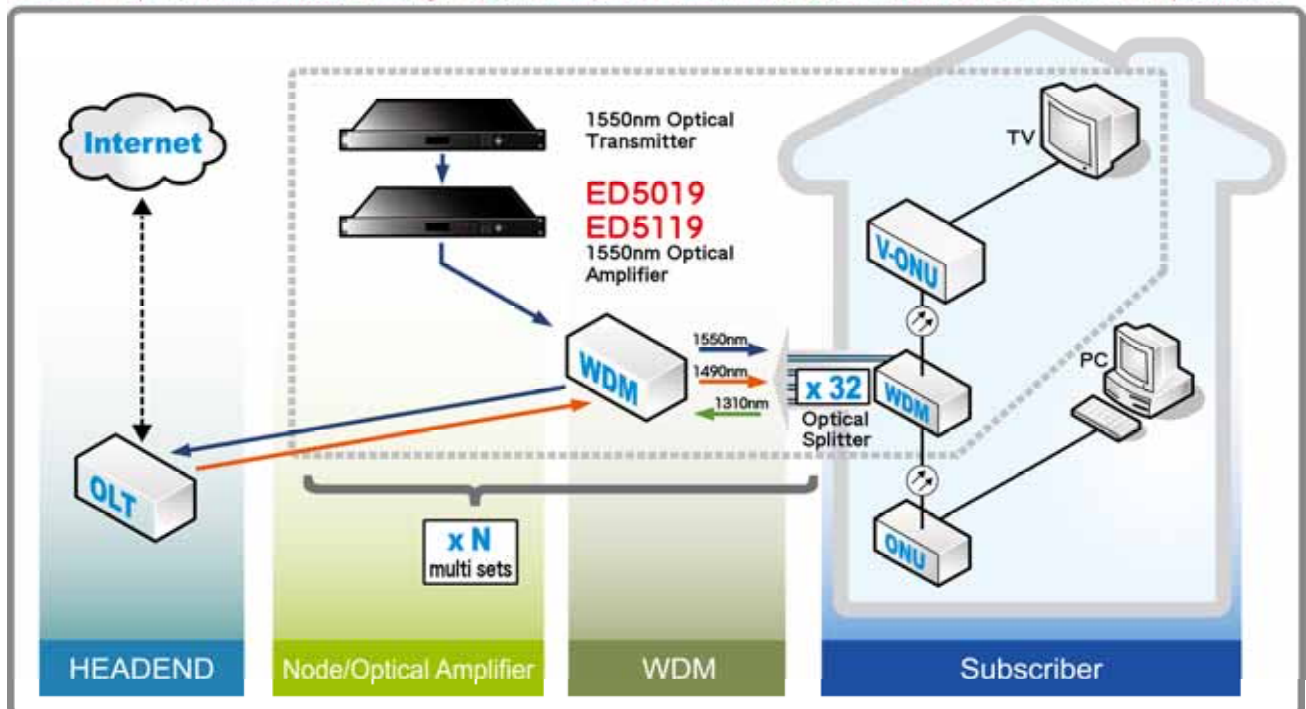
Conforms to the RoHS standard

Block Diagram



Application

In FTTx Network, 1550 nm wavelength is usually used for RF signal transport. RF signal is launched from an optical transmitter, through optical amplifier and linked to V-ONU at the subscriber's premise.



Specifications

ACI Communications, Inc.		ACI ED 5019		
PARAMETERS	CONDITIONS	UNITS	SPECIFICATION	NOTES
Optical Specification				
Wavelength		nm	1550 ± 10	
Noise Figure (@Pin (EDFA) = 0dBm)		dBm	≤ 5.0dB(@Pout < 20) ≤ 5.5dB(@Pout ≥ 20)	
Optical Output Power(1 port)	0 dBm input@ 25	dBm	14 to 23 ± 0.5	
Optical Output Power(2 ports)	0 dBm input@ 25	dBm	11 to 20 ± 0.5	
Polarization sensitivity		dB	0.5	
Optical power variation		dB	± 0.5	
Optical connector			SC/APC with shutter, FC/APC or E2000 / APC (Optional)	
Minimum optical input power for rated output power		dBm	0 (When output ≤ 20) 4 (When output > 20)	
Electrical/Physical/Environmental				
Control Interface			RS485 or Ethernet (SNMP)	
Power Supply	50/60 Hz	VAC	90 ~ 260	
Power Consumption	Max.	W	50	
Operating Temp			0 to 50	
Storage Temp.			-20 to +60	
Relative Humidity	Max.	%	95	
Dimension(WxDxH)	W x D x H	mm	85 x 350 x 45	
Weight		kg	< 5.2	

Ordering Matrix

ACI ED 5019 Configuration Sheet

Customer: _____

Created By: _____ Order Date: _____

ORDERING MATRIX

2009/6/29

Position	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PART NUMBER	E	D	5	0	1	9									

7 **CONTROL INTERFACE**
None (keep blank): RS-485
M: Ethernet for SNMP

9 **OUTPUT PORT**
None (keep blank): 1port
2: 2 port

11~12 **OUTPUT POWER**
11: 11 dBm
: :
23: 23 dBm

Note:
1 port: 14~23dBm
2 port: 11~20dBm

14~15 **OPTICAL CONNECTOR**
SC: SC/APC with shutter
FC: FC/APC
E2: E2000/APC

NOTES:

Example:
ED5019-16-SC: EDFA w/ RS-485, 1port x 16dBm, SC/APC connector
ED5019M-2-17-SC: EDFA w/ Ethernet, 2 port x 17dBm, SC/APC connector

ACI Communications, Inc. reserves the right to discontinue the manufacture or change the specifications without prior notice on any parts illustrated in the data sheet.

Address: 23307-66th Avenue South, Kent, WA-98032 USA

Phone: (253)854-9802 Fax: (253)813-1001

www.acicomms.com

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