

ACI Communications, Inc.

A187 V-ONU
870MHz
Video FTTH Optical
Network Unit

#### **Overview**

The A187 V-ONU is a high performance CATV optical receiver for converting TV signal from optical fiber network into RF signal over coax cabling in residential homes. This module features compact size, high CNR, low distortion, low power consumption, easy installation and cost effectiveness. It supports conventional analog TV RF as well as Digital Video Broadcasting signals. The A187 is the best choice to be used in combination with a managed Ethernet gateway to deliver FTTH triple play services.

#### **Features**

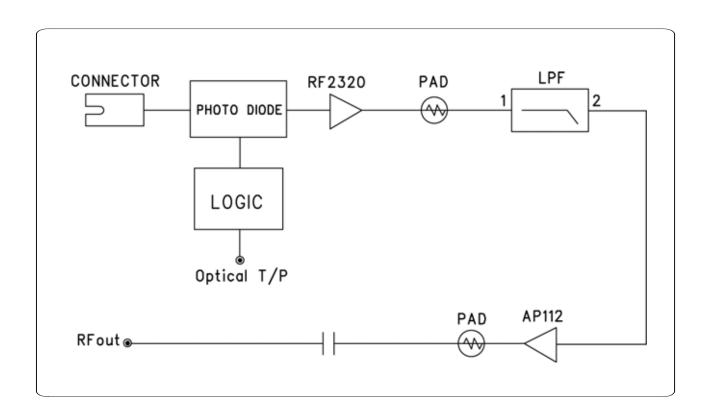
Remote powering.

Provide the interface of Network service for FTTH application.

Compact integrated mechanical.

Module design and Plug & Play function.

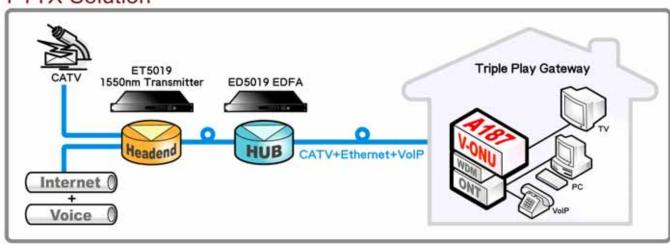
#### **Block Diagram**



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## **Application**

### **FTTX Solution**



## **Specifications**

ACI Communications, Inc. A187 870MHz V-ONU FTTH Optical Network Un						
PARAMETERS	CONDITIONS	UNITS	SPECIFICATION	NOTES		
RF						
RF frequency range		MHz	47 ~ 862			
Flatness		dB	± 1			
Return loss		dB	-18dB@40~80MHz			
			-16.5dB@80~160MHz			
			-15dB@160~320MHz			
			-13.5dB@320~640MHz			
			-12dB@640~870MHz			
RF Output level	(@ -10dBm optical input	dΒμV	74			
	level, OMI 5%/CH)					
RF output level	(@ 0dBm optical input	dΒμV	94			
	level, OMI 5%/CH)					
cso	(@ -4 dBm input, OMI	dBc	< -60			
	5%/CH)					
СТВ	(@ -4 dBm input, OMI	dBc	< -60			
	5%/CH)					
C/N	(@ -10 dBm input, OMI	dB	-46			
	5%/CH)	Typically				

# **Specifications**

ACI Communications, Inc. A187 870MHz V-ONU FTTH Optical Network Unit								
PARAMETERS	CONDITIONS	UNITS	SPECIFICATION	NOTES				
Optical								
Input fiber type			Standard Single Mode Fiber					
			(ITU-T G.652)					
Receiver wavelength range	elength range nm 1290~1600		1290~1600					
Optical input power		dBm	0 ~ -10					
Threshold for LED signal indicating		dBm	- 46					
		Typical	- 40					
Optical return loss input		dB	≧ 40					
Mechanical								
Dimension(WxDxH)	Housing Only	mm	77.6 x 39.6 x 18					
Housing			Shielded					
Optical connector			SC/APC receptacle directly					
			on receiver housing					
RF connector			F-female (IEC 169-24)					
Power input								
Input voltage		VDC	6					
Dissipation	max	W	1.8					
Environment								
Optical temperature			0 ~ 50					
Storage condition			-20 ~ 70					

All specification is defined under 1550nm optical input.

### **Ordering Matrix**

A187 Configura	ation Sheet				
Created By:					
ORDERING MATRIX					2009/11/13
Position		1	2		
PART NUMBER	A187 V-ONU	S	С		
1-2 Connector S C = SC/APC					
NOTES:					

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.

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