

AC-180L

Product Specification



IEEE 802.11ac/a/b/g/n 1x1
Wireless Module

AC-180L Specifications



Hardware	
Standard	IEEE 802.11ac/a/b/g/n
Chipset	Marvell 88W8887 SoC
Host Interface	SDIO
Host Connector	LGA type
Operating Voltage	DC 3.3V
Power Consumption	<2W
Antenna Connector	u.FL-R-SMT compliant connector

Output Power	IEEE 802.11g/n	IEEE 802.11a/n	IEEE 802.11ac
	18dBm@6~36M	15dBm@6~36M	15dBm@HT80/MCS0~6
	16dBm@18~54M	14dBm@48~54M	14dBm@HT80/MCS7
	18dBm@HT20/MCS0~4	15dBm@HT20/40/MCS0~4	12dBm@HT80/MCS8
	18dBm@HT40/MCS0~4	14dBm@HT20/40/MCS0~4	10dBm@HT80/MCS9
	16dBm@HT20/MCS5,6	13dBm@HT20/40/MCS0~4	
	15dBm@HT40/MCS5,6		
	14dBm@HT20/MCS7		
	13dBm@HT40/MCS7		

Rx Sensitivity	IEEE 802.11g/n	IEEE 802.11a	IEEE 802.11ac
	-85dBm@11Mbps	-85dBm@6Mbps	-61dBm@VHT20/MCS7
	-85dBm@6Mbps	-69dBm@54Mbps	-58dBm@VHT40/MCS7
	-69dBm@54Mbps		-55dBm@VHT80/MCS9
	-64dBm@HT20/MCS7		
	-61dBm@HT40/MCS7		

Modulation	IEEE 802.11b (DSSS)	IEEE 802.11g (OFDM/DSSS)
		5.5/11 Mbps (CCK)
	2 Mbps (DQPSK)	24/36 Mbps (QAM-16)
	1 Mbps (DBPSK)	12/18 Mbps (QPSK)
		6/9 Mbps (BPSK)
	IEEE 802.11n (OFDM/DSSS)	IEEE 802.11ac
	QAM-64	QAM-256
	QAM-16	QAM-64
	QPSK	QAM-16
	BPSK	QPSK
		BPSK

Operating Frequency	2.4GHz Frequency	5GHz Frequency
	2412~2472MHz	5150~5250MHz
		5250~5470MHz
		5470~5725MHz
		5725~5850MHz

AC-180L Specifications



Software	
Standard	IEEE 802.11i security standard IEEE 802.1x security standard IEEE 802.11e standard
Operation Mode	Infrastructure mode Ad-hoc mode
Power Management	Power save mode Deep Sleep mode
Security	WAPI WPA/WPA2/WPA-PSK/WPA2-PSK 64-bit and 128-bit WEP EAP-TLS/EAP-TTLS/EAP-PEAP

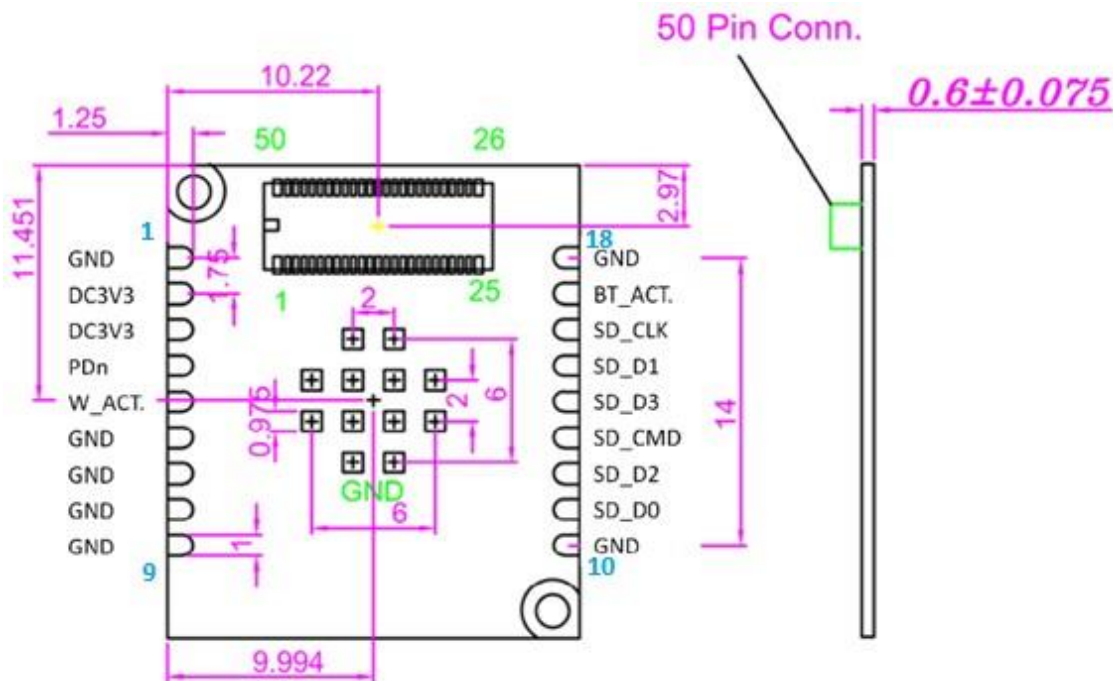
Physical	
Dimension	20mm (L) x 23mm (W) x 3.85mm (H)

Environmental	
Operating Temperature	-30 ~ +75°C
Operating Humidity	10 ~ 90% relative humidity non-condensing
Storage Temperature	-30 ~ +80°C
Storage Humidity	10 ~ 90% relative humidity non-condensing
Green	RoHs/REACH compliant
Warranty	12 months

Approvals	
FCC	FCC Part 15B FCC Part 15C

AC-180L Specifications

LGA PIN Definition



Pin	Name	Description	Pin	Name	Description
LGA1	GND	Ground	LGA10	GND	Ground
LGA2	DC3V3	3V3	LGA11	SD_D0	Data 0
LGA3	DC3V3	3V3	LGA12	SD_D2	Data 2
LGA4	PDn	Full Power Down	LGA13	SD_CMD	Command
LGA5	GPIO2	WLAN Act. / LED Output	LGA14	SD_D3	Data 3
LGA6	GND	Ground	LGA15	SD_D1	Data 1
LGA7	GND	Ground	LGA16	SD_CLK	Clock
LGA8	GND	Ground	LGA17	BT_ACT.	BT LED Output
LGA9	GND	Ground	LGA18	GND	Ground

Copyright © 2016 Zcomax Technologies Inc.

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without prior written permission

Zcomax Technologies, Inc. 14545 Valley View Ave., Suite S, Santa Fe Springs, CA 90670

Tel: (562) 926-4588 Fax: (562) 926-7885

Web: www.zcomax.com Email: sales@zcomax.com

Document DS-AC-180L 1.3 10188 160510