

## **WIRELESS AND BROADBAND**

DIGISOL Outdoor 900Mbps 5GHz Point to Point 20Kms with Dish Antenna

### DG-WA5ACL20

#### **Key Features:-**

- 900Mbps 11ac Standard on 5GHz.
- · With 29dBi high gain dish antenna, up to 20 km.
- · Supports 48V standard PoE and 12V DC power supply
- Support TDMA, ATPC
- · Support one click pairing
- Support lpv6
- Used special TVS lightning protection device improves the ability of the product in bad environment



#### Introduction:-

**DIGISOL** DG-WA5acL20 is an 11ac 900Mbps long range outdoor PTP; Powerful hardware platform with 802.11ac technology based radio and a proprietary data transmission protocol (TDMA). Incorporating a QCA 9563 CPU (750 MHz), a QCA 9886 radio and 128 MBytes of RAM and 16 MBytes of flash memory, with 29dBi high gain dish antenna, the DG-WA5acL20 becomes the preferred product for long-distance point-to-point.





#### **Technical Specifications:-**

HARDWARE SPECIFICATION					
ITEM	DG-WA5ACL20				
Hardware	0040560.0040006	0040004			
Chips	QCA9563+QCA9886+QCA8334				
Flash	SPI NOR 16MB				
DDR	DDR2-128MB				
WAN	1x10/100/1000 Base-T, Rj45, 48V PoE power supply				
LAN	1x10/100/1000 Base-T, RJ45				
LED	Power, Wan, Lan, Wireless, RSSIx4				
ESD	±6KV				
Surge test	Line to line ±2KV				
Power supply	12V 1.5A DC or 48V 0.5A PoE (48V PoE adapter is included in the package)				
Power consumption (max)	<15W				
Slide Switch	One key setting master or slave				
Reset key	Press the key for 2 $^{\sim}$ 5 seconds to pair automatically, press and hold for 10 seconds to restore the factory default configuration				
Dimensions	186 mm (Length) x 86mm (width) x 33mm (height )				
Mounting	Combination wall / pole mount included				
Protective class	IP65				
Operating temperature	Normal - 30 °C to + 55 °C , limit - 40 °C to + 70 °C				
Humidity	5~95% (non-condensing)				
Wireless					
WLAN standard	IEEE 802.11 a/n/ac wave2, TDMA				
Radio mode	TDMA MIMO 2x2				
Radio frequency band	5150~5850MHz				
Transmit power	Up to 26 dBm (country dependent)				
Receive sensitivity	Varying between -90 and -58 dBm depending on modulation				
Channel size	20, 40,80 MHz				
Modulation schemes	802.11 a/n: OFDM (64-QAM, 16-QAM, QPSK, BPSK)				
	802.11 ac: OFDM (256-QAM, 64-QAM, 16-QAM, QPSK, BPSK)				
Data rates	802.11 ac @ 40 MHz: 400, 360, 300, 270, 240, 180, 120, 90, 60, 30 Mbps				
	802.11 ac @ 80 MHz: 866, 780, 650, 585, 520, 390, 260, 195, 130, 65 Mbps				
Error correction	FEC, LDPC				
Duplexing scheme	Time division duplex				
5.8G TX Power	820.11a	54M	21±2dBm	6M	24±2dBm
	820.11n HT20	MCS7	21±2dBm	MCS0	24±2dBm
	820.11n HT40	MCS7	20±2dBm	MCS0	23±2dBm
	820.11ac HT80	MCS9	19±2dBm	MCS0	22±2dBm
5.8G Receive sensitivity	820.11a	54M	-72dBm	6M	-90dBm
	820.11n HT20	MCS7	-70dBm	MCS0	-88dBm
	820.11n HT40	MCS7	-68dBm	MCS0	-86dBm
	820.11ac HT80	MCS9	-58dBm	MCS0	-85dBm
5.8G EVM	802.11a; ≤-25dB; 802	.11n: ≤-28 dB; 802.11a	c: ≤-32 dB	1	

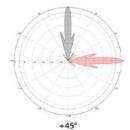


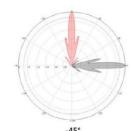
#### **Technical Specifications:-**

FIRMWARE SPECIFICATIONS				
ITEM	DG-WA5ACL20			
Software				
Wireless operating modes	Access point (auto WDS), access point (TDMA3), station (WDS, TDMA3), station (ARP NAT)			
Wireless techniques	Smart station polling, Smart auto-channel, Adaptive auto modulation, Automatic transmit power control (ATPC)			
Wireless security	WPA/WPA2 personal, WPA/WPA2 enterprise, WACL, user isolation			
Wireless QoS	4 queues prioritization on TDMA			
Network operating modes	Bridge, Router iPv4, Router IPv6			
Network techniques	Routing with and without NAT, VLAN			
WAN protocols	Static IP, DHCP client, PPPoE client			
Services	DHCP server, SNMP server, NTP client, Router advertisement daemon, Ping watchdog			
Management	HTTP(S) GUI, SSH, SNMP read, WNMS, Telnet			
Tools	Site survey, Link test, Antenna alignment			

#### **Antenna Specification:**

Туре	Dual polarization dish antenna
Gain	29 dBi
Frequency range	5180 -5850 MHZ
Gain	29 dBi
Polarization	±45°
Cross-pol Isolation	30 dBi
VSWR	<1.8
Azimuth beam width (H pol)	6°
Azimuth beam width (V pol)	6°
Elevation beam width	6°





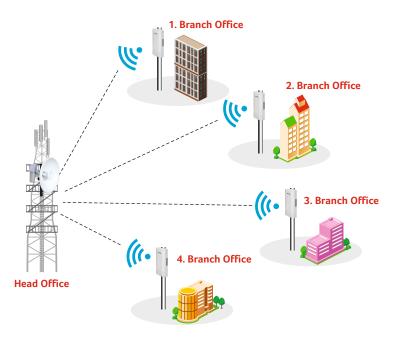
#### **Accessory:**

CPE	1
Dish Antenna	1
PoE Adapter	1
Guide Manual	1
Gift Box	1



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# Application Examples PtMP Client Links



The DG-WA5ACL20 used as a CPE device for each client in an Point-to-MultiPoint (PtMP) network.



Use a DG-WA5ACL20 on each side of a Point-to-Point (PtP) link.

#### **Performance**



#### **Ordering Information:-**

DG-WA5ACL20: DIGISOL 5GHz 900Mbps Wave2 Outdoor P2P 20Kms PoE AP with Dish Antenna

 $*Warranty shall be subject to terms and conditions specified in the {\tt DIGISOLPRODUCTWARRANTY} displayed on the {\tt website} of the company. \\$ 

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