

Wireless Access Controller

DG-WU2002



The DG-WU2002 is a smart box-type access controller (AC) for small and medium wireless networks and large enterprise branches. It can combine with smart wireless access points (APs) to form a centrally managed wireless LAN (WLAN) solution.

The DG-WU2002 supports two 10/100/1000Base-T electrical ports, and can manage up to 128 smart wireless APs. The device provides strong WLAN access control through systems such as precise user control and management, complete RF management and security mechanism, seamless roaming, and authentication based on existing networks. Underpinned by a smart cluster management technology, the solution automatically adjusts AP power and channels by monitoring and controlling the RF environment of each AP in real time, and balances loads based on the number of users or traffic to minimize interference to wireless signals and stabilize wireless network loads.

Powered by cutting-edge IPv6 technology, DG-WU2002 is designed with full IPv6 compatibility. The device supports a broad range of static routing protocols including RIP, OSPF and PIM, as well as dynamic routing protocols such as IPv6 RIPng, OSPFv3 and PIM6.

A rich service array coupled with considerable cost efficiency positions the DG-WU2002 as a wireless AC preferred for small and medium networks as well as large enterprise branches.

Product Specifications:-

Hardware Specifications

Features	DG-WU2002
Service port	Two 10/100/1000Base-T
Management port	One console port (RJ-45)
Power supply	AC 100 V to 240 V, 50 Hz to 60 Hz
Maximum power consumption	8W
Working/Storage temperature	0°C to +50°C -40°C to +70°C
Working/Storage RH	5% to 90% (non-condensing)
Dimensions (W x D x H)	328.2 mm x 170 mm x 42.2 mm

Software Specifications

Features	DG-WU2002
Base number of manageable APs	16
Maximum number of manageable Aps	128
Number of manageable Acs in a cluster	64
AP Upgrade Step	16
Maximum number of concurrent wireless users	5k
VLANs	4K
ARP table	8K
Switching time during roaming	< 30 ms
L2 protocols and standards	IEEE802.3 (10Base-T), IEEE802.3u (100Base-TX), IEEE802.3ab (1000Base-T), IEEE802.1Q (VLAN), IEEE802.1p (COS), IEEE802.1x (Port Control) IGMP Snooping, MLD Snooping GVRP, PVLAN
L3 protocols and standards	Static Routing RIPv1/v2, OSPF, VRRP, IGMP v1/v2/v3 ARP PIM-SM, PIM-DM, PIM-SSM
Wireless protocols and standards	802.11, 802.11a, 802.11b, 802.11g, 802.11n, 802.11d, 802.11h, 802.11i, 802.11e, 802.11k
CAPWAP protocol	Supports L2/L3 network topology between an AP and an AC.
	Enables an AP to automatically discover an accessible AC.
	Enables an AP to automatically upgrade its software version from an AC.
	Enables an AP to automatically download configurations from an AC.
Ipv6 protocols and standards	IPv4/v6 dual-stack, DHCPv6, DNSv6, ICMPv6, ACLv6, TCP/UDP for Ipv6, SOCKET for IPv6, SNMP v6, Ping /Traceroute v6, RADIUS, Telnet/SSH v6, FTP/TFTP v6, NTP v6, IPv6 MIB support for SNMP, VRRP for IPv6, static routing, OSPFv3, IPv6 SAVI
High Reliability	1+1 fast backup, N+1 Backup, N+N Backup, Portal 1+1 Backup
	Setting country codes
	Manually/automatically setting the transmit power
	Manually/automatically setting the working channel
	Automatically adjusting the transmission rate
	Blind area detection and repair

Features	DG-WU2002
	RF environment scanning, which enables a working AP to scan the surrounding RF environment
	RF interference detection and avoidance
	11n-preferred RF policy
	SSID hiding
	20 MHz and 40 MHz channel bandwidth configuration
RF management	Airtime protection in hybrid access of 11bg and 11n terminals
	Terminal-based airtime fairness scheduling
	Spectral analysis
	Terminal locating (A terminal locating algorithm can be embedded in the AC)
	Spectral navigation (5 GHz preferred)
	11n only
	SSID-based or Radio-based limit on the number of users
	User online detection
	Automatic aging of traffic-free users
	Prohibiting the access of clients with weak signals
	Remote probe analysis
	Forced roaming of clients with weak signals
	64/128 WEP, dynamic WEP, TKIP, CCMP, and SMS encryption
	802.11i security authentication and two modes (Enterprise and Personal) of 802.1x and PSK
	WAPI encryption and authentication
	LDAP authentication
	MAC address authentication
	Portal authentication, including built-in portal, external portal, and custom portal authentication modes
	PEAP user authentication
	Forwarding security control, such as frame filtering, white list, static blacklist, and dynamic blacklist
User isolation	
Security	Periodic Radio/SSID enabling and disabling
	Access control of free resources
	Secure admission control of wireless terminals
	Access control of various data packets such as MAC, IPv4, and IPv6 packets
	Secure access control of APs, such as MAC authentication, password authentication, or digital certificate authentication between an AP and an AC
	Radius Client
	Backup authentication server
	Wireless SAVI
	User access control based on AP locations
	Wireless intrusion detection system (WIDS) and wireless intrusion prevention system (WIPS)
	Protection against flooding attacks
	Protection against spoofing attacks
Forwarding	IPv6 access and forwarding; constructing IPv6 WLAN access service on an IPv4 network; providing IPv4 WLAN access service on an IPv6 network; and constructing private IPv6 WLAN network service on an IPv6 network
	Fast L2 roaming between APs served by the same AC

Features	DG-WU2002	
	Fast L2 roaming between APs served by different ACs	
	IPv4 and IPv6 multicast forwarding	
	WDS AP	
QoS	802.11e (WMM); and 4-level priority queues, ensuring that applications sensitive to the real-time effect, such as voice and video services, are transmitted first	
	Ethernet port 802.1P identification and marking Mapping from wireless priorities to wired priorities	
	Mapping of different SSIDs/VLANs to different QoS policies Mapping of data streams that match with different packet fields to different QoS policies	
	Access control of MAC, IPv4, and IPv6 data packets	
	Load balancing based on the number of users Load balancing based on user traffic Load balancing based on frequency bands CAC based on the number of users Bandwidth limit based on APs Bandwidth limit based on SSIDs Bandwidth limit based on terminals Bandwidth limit based on specific data streams	
	Power saving mode	
	Multicast-to-unicast mechanism	
	Automatic emergency mechanism of APs	
	Intelligent identification of terminals	
	Management	Web management
		Configuration through a console port
SNMP v1/v2c/v3		
Both local and remote maintenance		
Local logs, Syslog, and log file export		
Alarm		
Fault detection		
Statistics		
Login through Telnet		
Login through SSH		
Dual-image (dual-OS) backup		
Hardware watchdog		
AC cluster management; automatic information synchronization between ACs in a cluster, and automatic or manual push of configuration information		
SSID-based user permission management mechanism		

Ordering Information:-

Product	Description
DG-WU2002	DIGISOL Wireless Access Controller

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