IWP-1000b/g

Industrial 802.11 b/g Redund ant Access Point

- *Dual Radio for 802.11b/g*
- *Supports AP / Bridge / Repeater / AP-Client Mode*
- *Supports X-Roaming < 100ms*
- *IP30 housing for industrial environment*
- *Provides 1 PoE P.D. port with 1KV isolation*

FCC CE RoHS

OVERVIEW

Lantech IWP-1000b/g is a reliable 802.11b/g WLAN with 2 ports LAN Access Point. It can be configured to operate in AP/Bridge/Repeater/AP-Client mode. Users are able to configure IWP-1000b/g by WEB interface via LAN port or WLAN interface. IWP-1000b/g provides dual Ethernet ports in switch mode, so that users can use Daisy Chain to reduce the usage of Ethernet switch ports.

With IEEE802.11b/g dual mode capability, IWP-1000b/g is able to operate with a maximum link speed of 54Mbps to maximize the capacity of communication channel. The security standards include WEP, WPA, WPA-PSK (TKIP, AES), WPA2, WPA2-PSK (TKIP, AES), 802.1X and Radius. These various kinds of

security standards for WLAN are also configurable to ensure the security of data transmission.

Lantech IWP-1000b/g supports HTTPs protocol over LAN or WLAN to assure the data security when users make configuration remotely. IWP-1000b/g also support switch mode. Users are able to use the Daisy Chain to reduce usage of Ethernet switch port. The redundant DC power inputs help to guarantee a non-stop operation. The backup power input will take over immediately when the primary DC power input fails.

IWP-1000b/g also provides P.D. feature on ETH2 which is fully compliant with IEEE802.3af PoE P.D. specification.

FEATURES & BENEFITS

- **High Speed Air Connectivity: WLAN interface support up to 54Mbps link speed**
- **Highly Security Capability: WEP/ WPA/ WPA-PSK (TKIP,AES)/ WPA2/ WPA2-PSK (TKIP,AES)/ 802.1X Authentication supported**
- **Support X-Roaming < 100 ms**
- **Support wireless load balance**
- **Support AP/Bridge/Repeater/AP-Client Mode**
- **Switch Mode Supported: Daisy Chain support to**

reduce usage of switch ports
- **Dual redundant Ethernet port support redundant mode (Recovery time < 10ms)**
- **Secured Management by HTTPs**
- **Event Warning by Syslog, Email, SNMP Trap, Relay and Beeper**
- **Rigid IP30 housing for industrial environment**
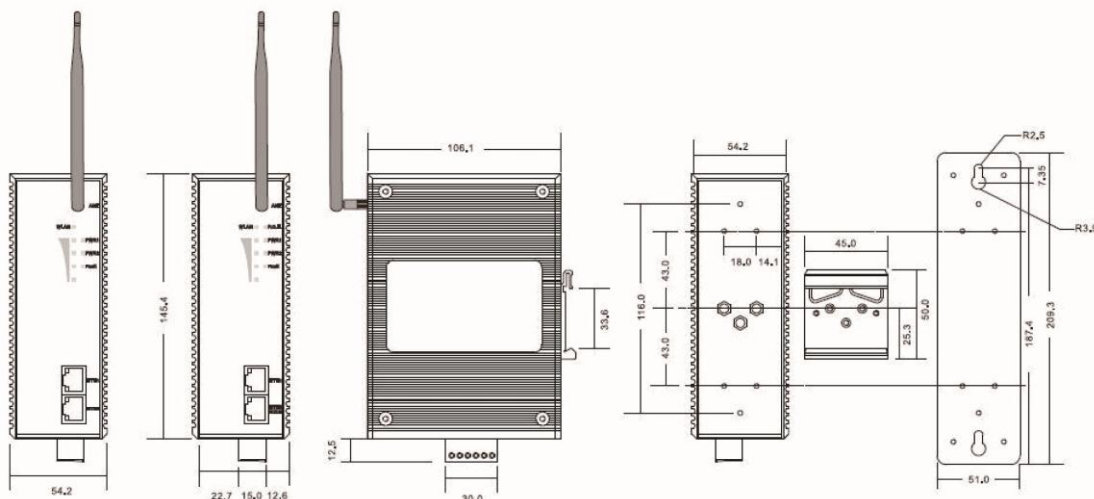- **DIN-Rail and Wall-mount enabled**

SPECIFICATION

Physical Ports	
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX	2
PoE P.D. Port	Present at ETH2 Fully compliant with IEEE 802.3af Power Device specification Over load & short circuit protection Isolation Voltage: 1000 VDC min. Isolation Resistance : 10^8 ohms min

WLAN Interface	
Operating Mode	AP/Bridge/Repeater/AP-Client
Antenna Connector	2dBi antenna on reverse SMA connector
Radio Frequency Type	DSSS, OFDM
Modulation	**IEEE802.11b:** CCK, DQPSK, DBPSK

	IEEE802.11g: OFDM with BPSK, QPSK, 16QAM, 64QAM
Frequency Band	**America / FCC:** 2.412~2.462 GHz (11 channels) **Europe CE / ETSI:** 2.412~2.472 Ghz (13 channels)
Transmission Rate	IEEE802.11b: 1 / 2 / 5.5 / 11 Mbps IEEE802.11g: 6 / 9 / 12 / 18 / 24 / 36 / 48 / 54 Mbps
Transmit Power	IEEE802.11 b/g: 20dBm max.
Receiver Sensitivity	-81dBm @ 11Mbps, PER< 8%; -64dBm @ 54Mbps, PER< 10%
Encryption Security	WEP : (64-bit ,128-bit key supported) WPA /WPA2 : IEEE802.11i(WEP and AES encryption) WPA-PSK (256-bit key pre-shared key supported) 802.1X Authentication supported TKIP encryption
Wireless Security	SSID broadcast disable

Datasheet Version 1.0

Protocol Support

Protocol	ARP,BOOTP, DHCP, DNS, HTTP, IP, ICMP, SNTP, TCP, UDP, RADIUS, SNMP, STP (IEEE 802.1D)

LED Indicators

Power indicator	PWR 1(2)(PoE) / Ready: Red On: Power is on and booting up. Green On: Power is on and functioning Normally.
10/100Base-T(X) RJ45 port indicator	Green for port Link/Act at 100Mbps. Amber for port Link/Act at 10Mbps.
WLAN LEDs	WLAN Link /ACT : Green Green LED(s) for WLAN Strength : 1<25%, 2<50%, 3<75%, 4<100% Fault
Fault	Red: Ethernet link down or power down

Fault contact

Relay	Relay output to carry capacity of 1A at 24VDC

Power

Redundant Input power	Triple DC inputs, 48VDC from PoE and Dual 12~48VDC on 6-pin terminal block
Power consumption (Typ.)	6 Watts
Overload current protection	Present
Reverse polarity protection	Present on terminal block

Physical Characteristic

Enclosure	IP-30
Dimension	54.2(W) x 106.1(D) x 145.4(H) mm
Weight	804g

Environmental

Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)
Operating Temperature	-10°C ~ 55°C (14°F ~ 131°F)
Operating Humidity	5% to 95% Non-condensing

Regulatory approvals

EMI	FCC Part 15, CISPR (EN55022) class A
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
Stability Testing	IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)
Safety	EN60950-1
MTBF	352,594
Warranty	5 years

DIMENSIONS (unit=mm)

ORDERING INFOMATION

■ **IWP-1000b/g…..…………...……….......P/N: 8810-558**
  Industrial 802.11 b/g PoE Redundant Access Point

■ **IWP-1000b/g…..…………...……….......P/N: 8810-559**
  Industrial 802.11 b/g Redundant Access Point

OPTIONAL ACCESSORIES

DIN Rail Power

■ AD1048-24FS	24VDC, 2A, Wide AC Input, Convection Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. -20°C~50°C
■ AD1024-24F	24VDC, 1A, Wide AC Input, Convection Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. -20°C~50°C
■ AD1240-48S	48VDC, 5A, Wide AC Input, Build-in fan Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. -20°C~50°C
■ AD1120-48F	48VDC, 2.5A, Wide AC Input, Build-in fan Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. -20°C~50°C

Datasheet Version 1.0