

# WGPS606 Operation Principle

1. CPU, U400, BCM53505S integrates 802.11b/g MAC+Baseband, 200-MHz MIPS32 core with a 3EDS/AES encryption engine, a USB host and device interface for printer server, and a configurable five- port 10/100Mbps Ethernet switch.
2. FLASH, U801, MX29LV160BBTC-90, 16Mbits Flash, Bottom sector, and 90ns. It is used to store the normal and test firmware.
3. Integrated 2.4GHz ISM Band RF-Baseband Transceiver, U2, BCM2050KML provide a fully integrated 802.11b/g RF solution. The radio supports all data rate and modulation formats required by 802.11b/g and has the lowest power dissipation.  
The BCM2520KML incorporates the complete RF receive and transmit paths including; phase lock loop (PLL), voltage controlled oscillator (VCO), low-noise amplifier (LNA), downconverter, upconverter, modulator and filter.
4. 2.4GHz – 2.5GHz Power Amplifier, U23, the AWL6153 is a power amplifier optimized for WLAN applications in the 2.4GHz-2.5GHz frequency range.
5. Power part: derives its power from a 12V DC power adapter which needs to be converted to 1.8V,3.3V and 5V DC.
6. LED part:

**Power:** on/off/blink: Green, Amber;

h Green: On – Power on and working mode

h Amber: Blinking - Reset to Factory Default

h Amber: Solid – Diagnostics Error

**LPT 1:** on/off/blink: Amber/Green

h Off – Printer detached

h Green: on – Printer Ready

h Green: Blinking – Data Transmission

h Amber: Solid – LPT Error

**LPT 2:** on/off/blink: Amber/Green

h Off – Printer detached

h Green: on – Printer Ready

h Green: Blinking – Data Transmission

h Amber: Solid – LPT Error

**Wireless:** on/off/blink: Blue

Alternate Blinking: Looking for network association

h Slow-Rate : Associated or joined with the network; no activity

h Fast-Rate : Associated or joined with the network; activity on the network

**LAN1 ~ LAN 4:** Green/Amber

h Green: 100Mbps

h Amber: 10Mbps

h Blinking: Activity

**Interface:**

- o 4 RJ-45 Port (LAN)
- o 2 USB Interface (Print Server)
- o 1 Reset button
- o Power Jet

**Operating Temperature:** *0-40C*

**Operating Humidity:** *10-90% RH*

**Storage Temperature:** *-20-70C*

**Storage Humidity:** *5-95% RH*

**Transmit Power:** *(802.11b-19 dBm+-1.5dbm)(802.11g-17dbm+-1.5dbm)*

**Antenna Diversity:** *Yes*