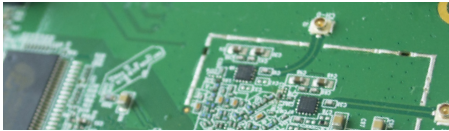


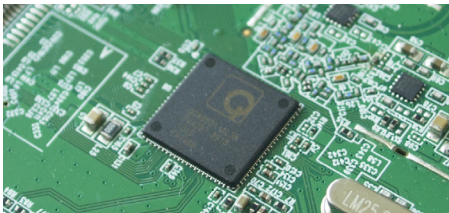


# THE WPJ531



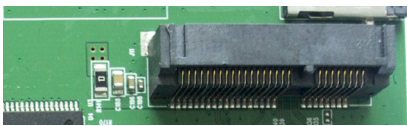
## 2.4Ghz 2x2 802.11n

WPJ531 features on-board single band 2x2 2.4Ghz 802.11n Wireless with speeds up to 300Mbps



## 650Mhz CPU

Powered by Qualcomm Atheros AR9531 Wireless System on Chip (WiSoC)



## MiniPCI-e Slot

Further expansion of Wireless Capabilities with the MiniPCI-e Slot, also support Cellular Card



## Dual 10/100 LAN

With Dual on-board FE or 10/100 RJ45 LAN Ports, allowing a WAN & LAN configuration or Dual LAN as well.



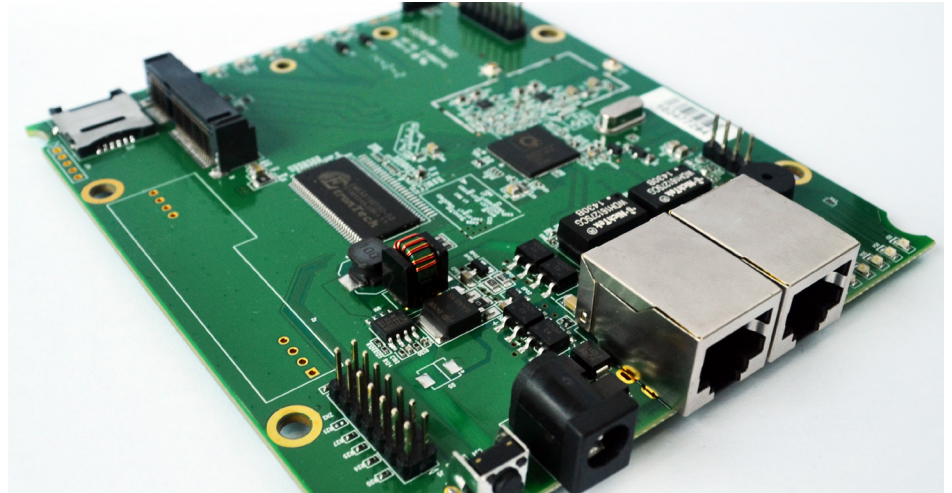
## 24V Passive PoE

WPJ531 support 24V Passive Power over Ethernet along with an integrated DC Jack.

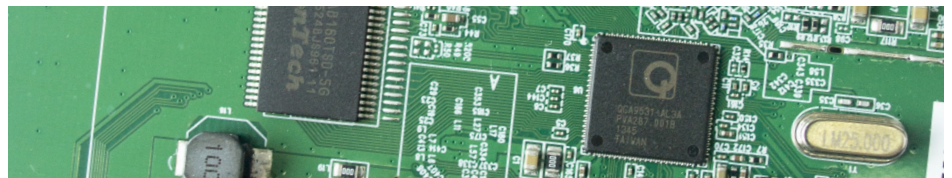


## SIM Enabled PIN

With a On-board allowing a SIM card slot further expanding its usage beyond its 802.11n capabilities



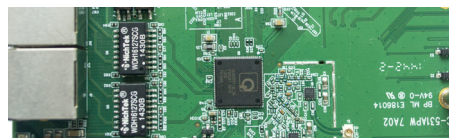
WPJ531 is a reliable and dynamic wireless embedded board based on the Atheros AR9531 CPU. It features a 550MHz network processor and integrates a 2.4Ghz 2x2 internal on-board radio and 1 miniPCIe slot that supports 802.11n radio. Embedded with 64MB memory and 8MB Flash, WPJ531 provides the ideal platform for any applications. WPJ531 has integrated Power over Ethernet (PoE) features that allows WPJ531 to be used in areas where power outlets are not readily available.



## Technical Specifications

|                          |  |   |  |
|--------------------------|--|---|--|
| <b>Processor</b>         | Qualcomm-Atheros AR9342                    | <b>Temperature Range</b>                | Operating: -20°C to 70°C<br>Storage: -40°C to 90°C                       |
| <b>System Memory</b>     | 64MB DDR2                                  | <b>Dimension</b>                        | 117 x 105 x 17mm (W x D x H)   |
| <b>NOR Flash</b>         | 16MB                                       | <b>Extras</b>                           | LED Pin, Serial Port, JTAG, Reset Button, Surge Arrestor, Watchdog Timer |
| <b>PCIe Slot</b>         | 9.2m height minPCIe slot                   | <b>Firmware</b>                         | ComplexWRT or OpenWRT  |
| <b>Ethernet</b>          | 2 x FE Port with Auto MDI/X                | <b>On-board Wireless</b>                | 2 x 2 MIMO 802.11n   |
| <b>Power</b>             | DC Jack & Passive PoE or IEEE 802.3af*     | <b>Operating Frequency</b>              | 2.4Ghz   |
| <b>Power Consumption</b> | TBC  | <b>Maximum Wireless Speed</b>           | 300Mbps  |
| <b>RoHS Compliance</b>   | Yes  | <b>On-board Radio Power</b>             | 26dBm (aggregate)  |
| <b>Humidity</b>          | Operating: 5% to 95%<br>Storage: Up to 90% | <b>On-board Radio Antenna Connector</b> | 2 x U.F.L  |

\*802.3af only available on WPJ531HV models



## Buzzer & LED Pin

Monitor WPJ531 performance and development with the on-board buzzer and 4 LED Pin.



# WPJ531 EXPANSIONS

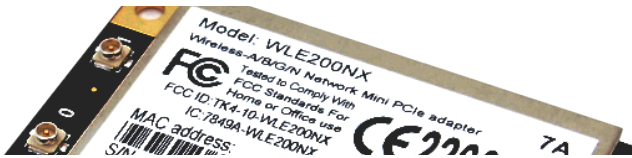
## MINIPCI-E SLOT X 1

Add 3G/4G Radio

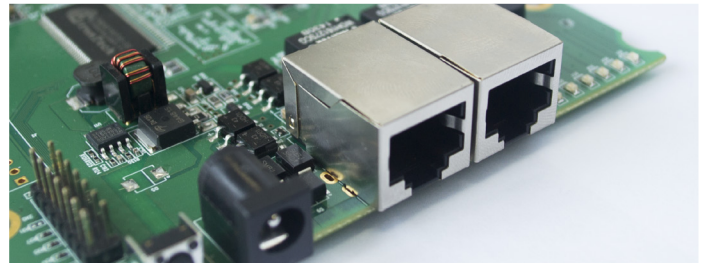


WPJ531 support third-party 3G/4G miniPCI-e Radio Modules for Effective Machine to Machine (M2M) communication to widen your network with ease.

Add Wireless Radio



WPJ531 support Compex 802.11n miniPCI-e Radio Modules to enable Dual Band support.



Upgrade to 802.3af  
WPJ531 is available with either  
Passive PoE or IEEE 802.3af Support

Default Passive PoE Model:

- **WPJ531LV**
- DC Jack 12 - 24V
- 24V Passive Power Over Ethernet

IEEE 802.3af Model:

- **WPJ531HV**
- DC Jack 24 - 48V
- IEEE 802.3af PoE
- 24V Passive PoE

## WPJ531 BOARD DIMENSIONS

| Item Code | Width  | Depth | Height |
|-----------|--------|-------|--------|
| WPJ531LV  | 105 mm | 95 mm | 17 mm  |
| WPJ531HV  | 105 mm | 95 mm | 17 mm  |

## WPJ531 EXTERNAL WIRELESS MODULE COMPATIBILITY

| Model              | Wireless Band | Operating Frequency | Channels   | Connector |
|--------------------|---------------|---------------------|------------|-----------|
| Compex WLE200NX    | 802.11a/b/g/n | 2.4Ghz / 5Ghz       | 2 x 2 MIMO | 2 x U.FL  |
| Compex WLE350NX    | 802.11a/b/g/n | 2.4Ghz / 5Ghz       | 3 x 3 MIMO | 3 x U.FL  |
| Compex WLE200N2-23 | 802.11b/g/n   | 2.4Ghz              | 2 x 2 MIMO | 2 x U.FL  |
| Compex WLE250NX    | 802.11a/b/g/n | 2.4Ghz / 5Ghz       | 2 x 2 MIMO | 2 x U.FL  |

## WPJ531 ORDERING INFORMATION

| Item Code | Firmware  | Processor | Power Solutions                    | NOR Flash | Memory |
|-----------|-----------|-----------|------------------------------------|-----------|--------|
| WPJ531LV  | CompexWRT | QCA9531   | DC Jack 12 - 24V + 24V Passive PoE | 64MB      | 16MB   |
| WPJ531HV  | CompexWRT | QCA9531   | DC Jack 24 - 48V + PoE 802.3af/at  | 64MB      | 16MB   |

## WPJ531 PACKAGING INFORMATION

| Carton Dimension      | Dimension         | Weight  | Dimensional Weight |
|-----------------------|-------------------|---------|--------------------|
| Packaging Box (50pcs) | 871 x 320 x 190mm | 6.135kg | 11kg               |