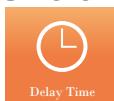


# VBOX-3210

AMD Merlin Falcon Embedded Platform RX-421BD/ RX-216GD APU with 2 x DP/ 2 x COM/ 5 x GbE/ 4 x POE/ 2 USB3.0/ DC Input 9~48V In-Vehicle Computer



## Features

- AMD Merlin Falcon RX-421BD/RX-216GD
- Wireless support LTE, 3.5G, WLAN, GPS, GSM/ GPRS, Bluetooth
- 5 x GbE w/optional 4 x POE 802.3at
- Input 9-48V with Ignition for Variety Vehicle
- 3 x Mini PCIe card & 1 x M.2 for extension
- 2 x DP, 1 x VGA

Taiwan Patent No. M447854

## System

<b>CPU</b>	AMD RX-421BD Quad Core 2.1GHz up to 3.4 GHz* AMD RX-216GD Dual Core 1.6GHz up to 3.0 GHz (Optional GX-224IJ, GX-215JJ) *Config to 15W
<b>Memory</b>	2 x SO-DIMM DDR4 up to 32GB (1 x SO-DIMM DDR4 for GX series)
<b>Graphics</b>	AMD Radeon™ graphics
<b>ATA</b>	2 x Serial ATA GEN 3.0
<b>LAN Chipset</b>	2 x Intel i210-AT; Ethernet Switch: 1 x Marvell 88E6176
<b>Watchdog</b>	1 ~ 255 level reset

## I/O

<b>Serial Port</b>	2 x RS232/422/485 (option additional 2 x RS232)
<b>USB Port</b>	2 x USB 3.0 ports and 2 x USB2.0 Ports
<b>LAN</b>	5 x RJ45 Ports GbE (Optimal for 4 x POE 802.3at/af*)
<b>Video Port</b>	VGA, 2 x DP (only 1 x DP for Gx series)
<b>GPIO Port</b>	4 In and 4 Out
<b>Audio</b>	Mic-in/Line-out/Line-in
<b>Expansion Bus</b>	3 x Mini-card slots 1 x M.2 A-E key 2230 slot
<b>Antenna</b>	4 x SMA-type External Antenna Connectors
<b>SIM Card Socket</b>	2 x SIM Card Sockets Supported Onboard with eject

\* When Power Input  $\geq$  24V, total PoE outputs is 100W max.  
When Power Input < 24V, total PoE output is 60W max.

## Power Requirement

<b>Power Input</b>	9V - 48V DC Power Input
<b>Power Management</b>	Vehicle Power Ignition for Variety Vehicle
<b>Power Off Control</b>	Power on/off Delay Time Setting by Software
<b>Battery (UPS)</b>	Internal Battery backup Kit for 10 Mins Operating (Optional) <b>Patent No. : M447854 - Build-in Battery</b>

## Storage

<b>Type</b>	1 x 2.5" Drive Bay for SATA Type Hard Disk Drive / SSD 1 x Cfast slot
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## Software

<b>Operating System</b>	WES 7, Windows 10, Linux Ubuntu 16.04
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## Environmental

<b>Operating Temp.</b>	-40 ~ 70°C (w/SSD)
<b>Storage Temp.</b>	-40 ~ 85°C
<b>Relative Humidity</b>	5 ~ 95% (non-condensing)
<b>Vibration(random)</b>	IEC60068-2-64, random, 2.5G@5~500Hz, 1hr/axis with SSD
<b>Vibration Operating</b>	MIL-STD-810G, Method 514.6, Procedure I, Category 4
<b>Shock</b>	Operating: MIL-STD-810G, Method 516.6, Procedure I, Trucks and semi-trailers=15G (11ms) with SSD
<b>Certifications</b>	CE, FCC Class A, E13

## Mechanical

<b>Construction</b>	Aluminum Alloy
<b>Mounting</b>	Wall-mount, Din Rail Mounting kit (Optional Internal Battery backup Kit)
<b>Weight</b>	1405g
<b>Dimensions</b>	240 x 161 x 85 mm

## Ordering Information

<b>Part Number</b>	VBOX-3210-R421 (w/RX-421BD) VBOX-3210-R216 (w/RX-216GD)
<b>Description</b>	AMD R-Series APU W / 2 x DP / 2 x COM / 5 x GbE / 4 x POE / 2 x USB 3.0 / DC Input 9~48V In-Vehicle Computer