

VIA

ARTiGO A820

Fanless low-profile gateway system with dual Ethernet and wireless connectivity options for enterprise IoT and M2M applications



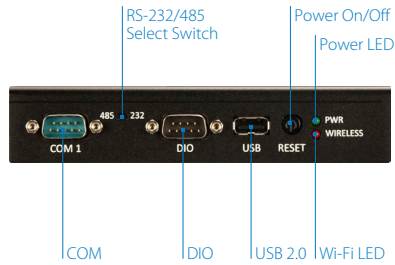
Features

- Fanless and ultra slim low profile (only 3cm height)
- Powered by NXP i.MX 6DualLite Cortex-A9
- Supports integrated graphics processing (GPU) for 3D/2D graphics acceleration
- Dual Ethernet support and wireless connectivity options available
- Linux BSP and customization services available

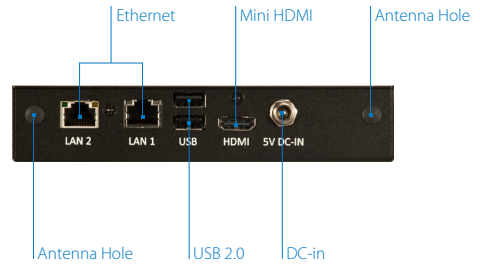
Specifications

Model Name	ARTiGO A820
Processor	1.0GHz NXP i.MX 6DualLite dual-core Cortex-A9 SoC
System Memory	1GB DDR3 SDRAM onboard
Storage	4GB eMMC Flash memory Micro SD Card
Graphics	Vivante GC880 2 Independent, integrated 3D/2D graphics processing units Graphics engine support OpenGL® ES 2.0, OpenVG 1.1 hardware acceleration Support MPEG-2, VC-1 video decoding up to 1080p
LAN	Micrel KSZ9031RNX Gigabit Ethernet Transceiver with RGMII support ASIX AX88772 USB2.0 to 10/100Mbps Fast Ethernet Controller
HDMI	Integrated HDMI 1.4 transmitter
USB	SMSC USB2514 USB 2.0 High Speed 4-port hub controller
Expansion I/O	1 miniPCIe slot
Front Panel I/O	1 USB 2.0 port 1 DIO port supports 8 GPIO (4 GPI+4 GPO) 1 COM port for RS232/RS485 supports 8-wire DTE mode with isolation feature 1 RS232/485 select switch for COM port 1 Reset button 1 Power & Wi-Fi LED
Back Panel I/O	1 HDMI port 2 USB 2.0 ports 1 Gigabit Ethernet port 1 10/100Mbps Ethernet port 2 Antenna holes for 3G/Wi-Fi 1 DC-in jack
Bottom Panel I/O	1 miniPCIe slot 1 Micro SD card slot 1 Micro SD/SPI boot switch
Power Supply	5V DC-in (Typical: 6.7W)
Operating System	Linux Kernel 3.14.28
Watchdog Timer	Integrated watchdog timer supports two comparison points. Each comparison point can interrupt ARM core, 2nd comparison point capable of generating external interrupts on WDOG line
Operating Temperature	0°C to 50°C
Operating Humidity	0% ~ 90% @ 45°C (non-condensing)
Storage Temperature	-10°C ~ 60°C @ 90% (non-condensing)
Vibration Loading During Operation	With onboard eMMC 5Grms, IEC 60068-2-64, random, 5 ~ 500Hz, 1hr/axis
Shock During Operation	With onboard eMMC 50G, IEC 60068-2-27, half size, 11ms duration
Dimensions	150mm(W) x 30mm(H) x 125.5mm(D) (5.91" x 1.18" x 4.94")
Weight	0.566kg (1.25lbs)
Mounting	VESA Mount (100mm x 100mm) (Optional)

Front Panel External I/O



Back Panel External I/O



Specifications

Model Name	ARTiGO A820
Mechanical Construction	Aluminum top cover Metal chassis housing
Compliance	CE/FCC

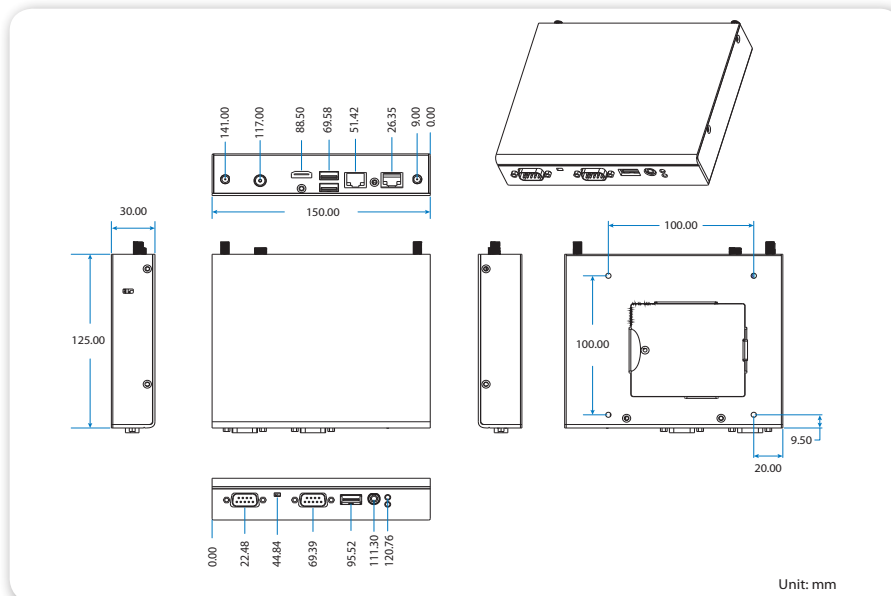
Ordering Information

Part Number	SoC Frequency	Description
ATG-A820-3D10A1	NXP i.MX 6DualLite Cortex-A9 dual-core SoC @ 1.0GHz	Fanless embedded system with 1.0GHz NXP i.MX 6DualLite Cortex-A9 Soc, 1GB DDR3 RAM, 4GB EMMC, Mini HDMI, 3 USB 2.0, COM, DIO, Gigabit Ethernet, 10/100Mbps Ethernet, Micro SD card slot, miniPCIe slot, 5V DC-in

Optional Accessories

Wireless Accessories	
Part Number	Description
00G027100BU2B00D0	VNT9271BU0DB IEEE 802.11 b/g/n USB Wi-Fi dongle
EMIO-1541-00A1	VNT9485 IEEE 802.11 b/g/n miniPCIe Wi-Fi module with assembly kit and antenna
EMIO-2550-00A1	3.75G HSPA/UMTS Mobile broadband full size miniPCIe module with GPS and SIM card slot

Dimensions



Packing List

Items
ARTiGO A820 system
AC-to-DC adapter
Power cord (USA type)
Console cable
Screw pack for miniPCIe card
Rubber feet pack