

# UNO-2058

## GX1-300 Universal Network Controller with GPS/GPRS Communication



### Features

- On-board GX1-300MHz, 64/128MB SDRAM
- Two RS-232/485 ports and one RS-232/422/485 ports
- RS-485 automatic flow control
- One 10/100Base-T RJ-45 port
- Supports GPS positioning
- Supports GSM/GPRS communication
- Isolated 4-channel DI and 4-channel DO
- One programmable diagnostic LED and buzzer
- Supports Modbus/RTU and Modbus/TCP devices
- Supports ADAM series for remote data acquisition and control
- Windows® CE .NET ready solution

### Introduction

UNO-2058 is a 586-grade industrial-grade fanless platform that provides two RS-232, one RS-232/422/485, one LAN, and two USB ports. Moreover, UNO-2058 provides GPS/GPRS two-way wireless communication for usage in mobile applications. The rugged industrial design has excellent anti-shock (50 G) and anti-vibration (2 G) properties, as well as a special aluminium heat sink design that makes it operate reliably in temperatures up to 55.°C without a fan. UNO-2058 is also IP30 certified.

UNO-2058 comes with a built-in Windows® CE .NET solution offering a pre-configured image with optimized on-board device drivers. Microsoft® Windows® CE .NET is a compact, highly efficient, real-time operating system designed for embedded systems without mechanical HDD limitations.

### Specifications

- **CPU** NS Geode™ GX1-300MHz with 64MB SDRAM on board
- **VGA/Keyboard/Mouse** DB-15 VGA connector, PS2 keyboard & mouse
- **Serial Port** 2 x RS-232/485 and 1 x RS-232/422/485
- **Automatic RS-485 data flow control**
- **Speed** RS-232: 50 bps ~ 230.4 kbps  
RS-422/485: 50 bps ~ 921.6 kbps
- **LAN** One 10/100Base-T RJ-45 port
- **USB** Two USB ports, USB OHCI, Rev. 1.0 compliant
- **SSD** One internal type/II CompactFlash slot
- **LED** Power, GPS, GPRS, reserved for DO.
- **GPS** Receiver: 16 channels, L1 civil frequency  
1575.42 MHz, C/A code  
Accuracy: 2.5m CEP  
GPS 2m CEP (Depending on accuracy of correction data).  
Signal reacquisition: < 1 sec.  
Protocol: NMEA-0183 input/output  
UBX binary input/output  
RTCM in
- **GPRS class** 10  
PBCCH support  
Coding Schemes: CS1 to CS4
- **SMS (Short Message Service) point-to-point MT/MO and SMS CB**
- **4-ch isolated Digital Input (DI0~DI3)** Supports dry/wet contact  
2000 V<sub>DC</sub> isolation  
70 V<sub>DC</sub> over-voltage protection
- **4-ch isolated Digital Output (DO0~DO3)** Open collector to 40V (200 mA max load)
- **Special power management design**

- **Anti-Shock** 50 G @ Wall mounting, IEC 68 section 2-27, half sine, 11ms w/CF
- **Anti-Vibration** 2 Grms @ Wall mounting, IEC 68-6, random, 5 ~ 500 Hz, 1 Oct./min, 1hr/axis
- **Power Supply** 9 ~ 36 V<sub>DC</sub>
- **Operating Temperature** -10 ~ 55° C (14 ~ 140° F) @ 5~85% relative humidity
- **Storage Temperature** -20 ~ 70° C (-4 ~ 158° F) @ 5~85% relative humidity
- **Relative Humidity** 95% @ 40° C
- **Chassis Size (WxDxH)** 188.8 x 106.5 x 51.0 mm (7.5" x 4.2" x 2.0")
- **Weight** 1.2 kg

### Ordering Information

- **UNO-2058CE-GDAO** GX1-300 Universal Network Controller with 64MB SDRAM and GPS/GPRS communication, built-in 32MB CF and Windows® CE.NET 4.2 OS.