

# ZNU-110

## NMEA-USB Isolation Gateway (RS-232 / RS-422 / RS-485)

### ■ Introduction

ZNU-110 NMEA-USB Isolation Gateway is basically a NMEA-0183 (IEC61162-1/2) serial to/from USB Gateway.

But, it is able to process all types of serial signals such RS-232, RS-422 and RS-485 as well as NMEA 0183, caused by multi-protocol design.

Most of all, Serial and USB circuits are galvanic isolated each other, this is the best solution for most communication problems and circuit breakdown by surge and very high common mode voltage.

So, it is very useful for bidirectional interfacing between most serial interfaces including NMEA 0183 devices and PC, Laptop, Smart-phone and etc.

This NMEA-USB Gateway does not require input power, because using USB. And it has Tx and Rx LEDs which indicates each traffic of Tx and Rx.

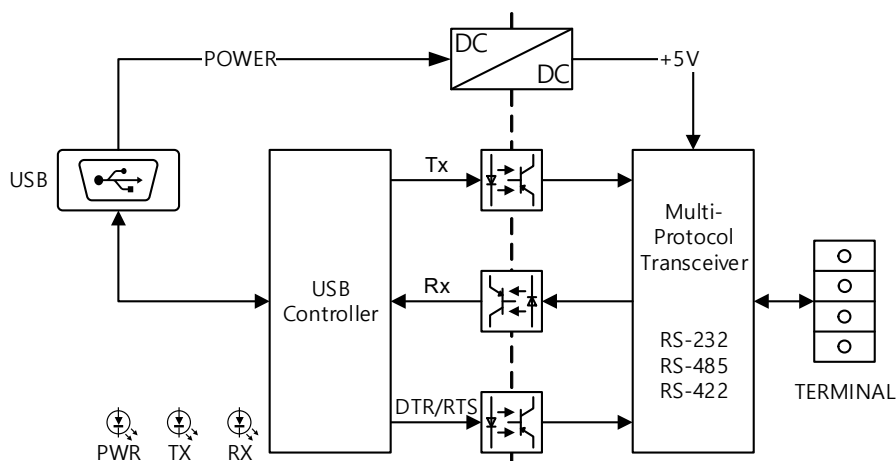
This is designed for considering high reliable and compliance with NMEA 0183 (IEC 61162) standard.



### ■ Application

- NMEA-0183 to/from USB Gateway
- RS-232, RS-422 and RS-485 to/from USB Gateway
- Galvanic Isolator between Serial device and PC
- Support for Windows, MAC OSX, Linux and Android

### ■ Block Diagram



## ■ Specifications

| Serial Ports            |  |
|-------------------------|--|
| Parameter               | - Data bit : 7 or 8 bits<br>- Stop bit : 1 or 2 bits<br>- Parity bit : odd, even and no parity |
| Protocol                | - NMEA-0183/HS (IEC61162-1/2), RS-232, RS-485, RS-422  |
| Baud Rate               | - 300bps ~ 921.6 kbps  |
| Additional Function     | - Slew Rate Limit<br>- Echo/Non-Echo Mode  |
| Terminal                | - Removable Screw Terminal Blocks for easy wiring  |
| USB                     |  |
| Protocol                | - USB 2.0 Full speed compatible  |
| Speed                   | - 12Mbps   |
| FIFO                    | - Rx : 128 Byte<br>- Tx : 256 Byte   |
| Mode                    | - Supports VCP (Virtual COM Port) mode and D2XX (Direct Driver)                                |
| Terminal                | - Micro USB B Female   |
| Indicator               |  |
| Input Power             | - Red LED for Power On and Operate   |
| Input Data              | - Green LED for Input Data   |
| Output Data             | - Yellow LED for Output Data   |
| Power                   |  |
| Input                   | - Supplied from USB Host through USB Cable<br>- DC 4.5V ~ 5.5V, Approximately 150mA            |
| Fuse                    | - Electronic Fuse, No Replacement Required   |
| Physical Specifications |  |
| Dimension               | - 70 x 40 x 23mm   |
| Weight                  | - 0.1kg  |
| Accessory               |  |
| Cable                   | - USB A (Male) to Micro B (Male), 1m   |
| Gender                  | - USB OTG Cable (Micro B-Male to USB A-Female), 10cm   |

## ■ Remark

- 1) If you need any other specifications, please contact us.
- 2) This specification may be changed without notification.