



# Product Introduction

## iKonvert - NMEA 2000/0183 Gateway

May 2019 Digital Yacht UK Tel + 44 1179 55 44 74 [www.digitalyacht.co.uk](http://www.digitalyacht.co.uk)

### iKonvert

Part Number: ZDIGIKVT

UPC: 081159830663

SRP £110.00 ex vat

### iKonvert USB

Part Number: ZDIGIKVTUSB

UPC: 081159830908

SRP £110.00 ex vat

# Introduction

iKonvert ISO  
NMEA2000-NMEA 0183



iKonvert USB  
NMEA2000-USB



Dear Partner

We're pleased to introduce iKonvert – a bi-directional NMEA 2000-0183 gateway designed for easy on board networking. It's available in two versions – an ISO (bare wire NMEA 0183) version for traditional marine electronic installations and USB for PC, MAC and Raspberry Pi interfacing.

Typical applications could include utilising older NMEA 0183 sensors and instruments within a modern NMEA 2000 network or taking NMEA 2000 data into a PC for use with charting, racing and instrument programs

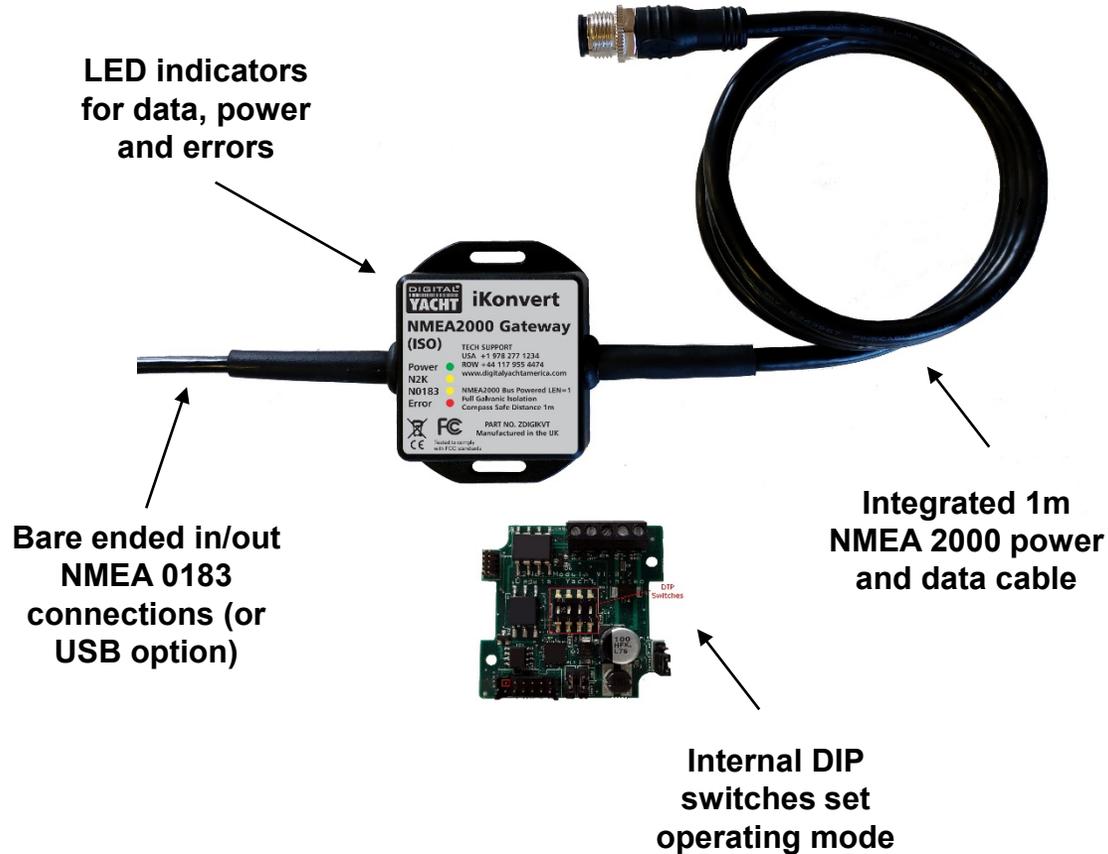
It's field programmable with simple DIP switches setting operating mode to allow for a multitude of installation options. The device also supports a raw mode where native NMEA 2000 data is outputted for developers to use with apps and devices

iKonvert is available May 2019

The Digital Yacht team  
TEL + 44 1179 55 44 74



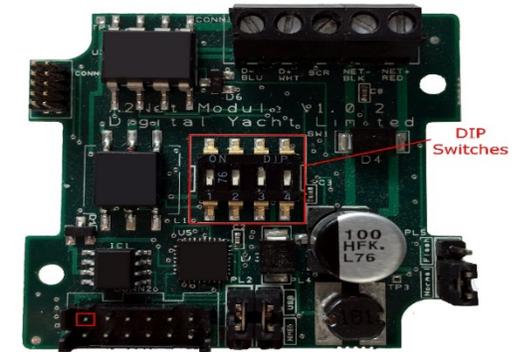
# Key Features



- Bi-directional NMEA 2000 to/from NMEA 0183 gateway
- Allows older sensors and instruments to integrate into a modern NMEA 2000 network
- Allows NMEA 2000 data to be used on older NMEA 0183 devices like displays, plotters and autopilots
- Easy to install
- ISO (bare wire NMEA 0183) or USB versions available
- 10 operating modes
- Field programmable via simple internal DIP switch selection
- Raw mode for full NMEA 2000 data passthrough – ideal for software developers
- Supports GPS, instruments and AIS
- 4800 or 38400 baud NMEA 0183 operation
- Self powered from NMEA 2000 network (1m cable included) – just “T” into network
- Fully isolated and galvanically protected
- NMEA 2000 Certified
- Ultra compact 50 x 67mm enclosure

# iKonvert Conversion Modes

| Switches<br>1234 | MODE               | Interface      | BAUD   | NMEA DATA                        | Sentences  |
|------------------|--------------------|----------------|--------|----------------------------------|--|
|                  | Gateway Mode       | NMEA0183       | 4800   | GPS/Navigation/Instruments       | RMC, HDG, VHW, MWV, DPT, MTW, APB, RMB, VLW, XTE, ROT, RSA         |
|                  | Gateway HS Mode    | NMEA0183       | 38400  | All Supported Sentences          | RMC, HDG, VHW, MWV, MTW, DPT, APB, RMB, VLW, RSA, ROT, VDO and VDM |
|                  | GPS Mode (1Hz)     | NMEA0183       | 4800   | GPS Only (1Hz)                   | RMC, GSA, GSV, ZDA   |
|                  | GPS HS Mode (10Hz) | NMEA0183       | 38400  | GPS Only (10Hz)                  | RMC, GSA, GSV, ZDA   |
|                  | Wind Mode (5Hz)    | NMEA0183       | 4800   | Wind Only (5Hz)                  | MWV  |
|                  | AIS Mode           | NMEA0183       | 38400  | AIS + GPS Only                   | VDO, VDM, RMC  |
|                  | Heading Mode       | NMEA0183       | 4800   | Headin Only (10Hz)               | HDG  |
|                  | Instrument Mode    | NMEA0183       | 38400  | GPS/Navigation/Instruments (1Hz) | RMC, HDG, VHW, MWV, DPT, MTW, APB, RMB, VLW, XTE, ROT, RSA         |
|                  | Depth Mode         | NMEA0183       | 4800   | Depth+Water Temp+GPS (1Hz)       | DPT, MTW, VHW, VLW, RMC  |
|                  | For Future Use     |                |        |                                  |  |
|                  | For Future Use     |                |        |                                  |  |
|                  | For Future Use     |                |        |                                  |  |
|                  | For Future Use     |                |        |                                  |  |
|                  | For Future Use     |                |        |                                  |  |
|                  | For Future Use     |                |        |                                  |  |
|                  | For Future Use     |                |        |                                  |  |
|                  | RAW Mode           | N2Net Protocol | 230400 | RAW NMEA2000 data over serial    | Not Applicable   |



Internal DIP switches set operating mode to allow for maximum flexibility – no complicated PC programming required

# Typical Applications

## GPS FOR DSC VHF

Many VHF radios do not feature a NMEA 2000 interface but require a GPS input for DSC operation. iKonvert is the solution

## INSTRUMENT DATA

You have an older set of instruments and purchase a modern chart plotter and require instrument displays on the plotter. iKonvert is the solution

## AIS DATA

Your existing AIS transponder only has a NMEA 0183 output and your new plotter is NMEA 2000 only. iKonvert is the solution

## PC CONNECTIVITY

You want to get NMEA 2000 data into your PC/MAC chart plotter software such as TimeZero, SmarterTrack, SeaPro etc. iKonvert USB is the solution

## OLD TRANSDUCER/SENSOR – NEW SYSTEM

You have an old depth or wind sensor with NMEA 0183 output and want to utilise this with a NMEA 2000 instrument – iKonvert is the solution

## SOFTWARE DEVELOPMENT

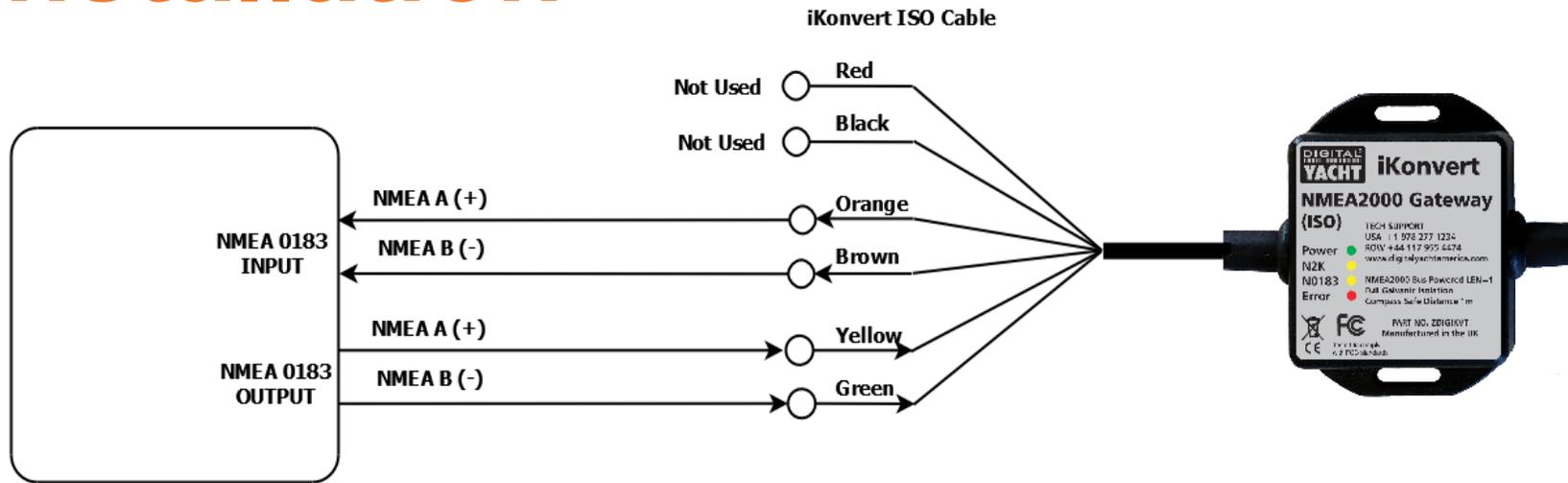
You want access to all NMEA 2000 data to write bespoke applications on a PC, MAC or even Raspberry Pi – iKonvert USB is the solution

## SEATALK SYSTEMS

Digital Yacht also have a Seataalk to NMEA gateway which can be used in conjunction with iKonvert for older systems



# Installation



EQUIPMENT WITH TWO WIRE  
NMEA 0183 CONNECTIONS  
(e.g. Raymarine, Navico, etc.)



If you need to build a NMEA  
2000 system, Digital Yacht's  
NMEA 2000 starter kit is an  
ideal solution

- iKonvert has an integral NMEA2000 cable terminated with a male connector that is designed to connect straightin to a standard NMEA2000 network via a spare “T-Piece”.
- iKonvert takes its power and data from the NMEA2000 network.
- If you are connecting iKonvert to a non-standard NMEA2000 network, then a suitable adaptor cable will need to be sourced from the relevant manufacturer:

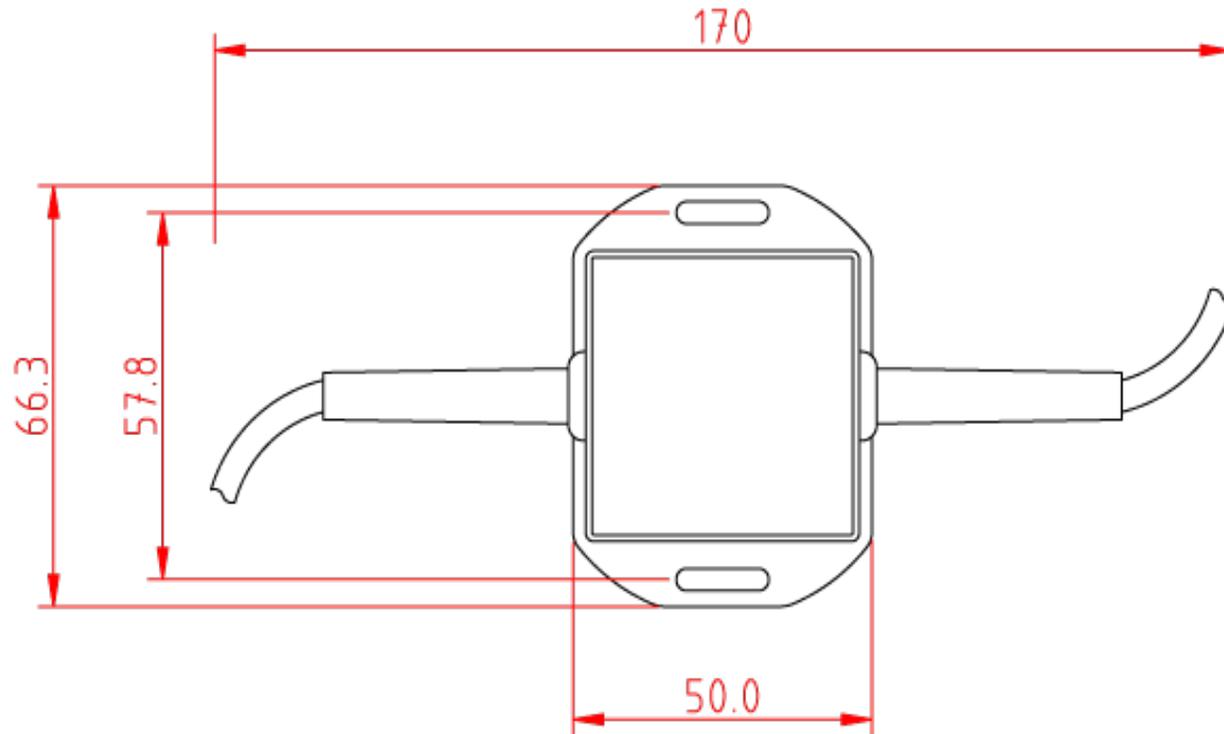
SeaTalkNG (Raymarine P/No A06045)

Simnet (Simrad P/No 24006199)



# Technical & Ordering

## Dimensions



## For developers:

Digital Yacht have created a github platform to help with your project. Visit:

<http://github.com/digitalyacht/iKonvert>

| Part Number | Description                         | UPC          | Price   |
|-------------|-------------------------------------|--------------|---------|
| ZDIGIKVT    | iKonvert Gateway with ISO interface | 081159830663 | £110.00 |
| ZDIGIKVTUSB | iKonvert Gateway with USB interface | 081159830908 | £110.00 |

