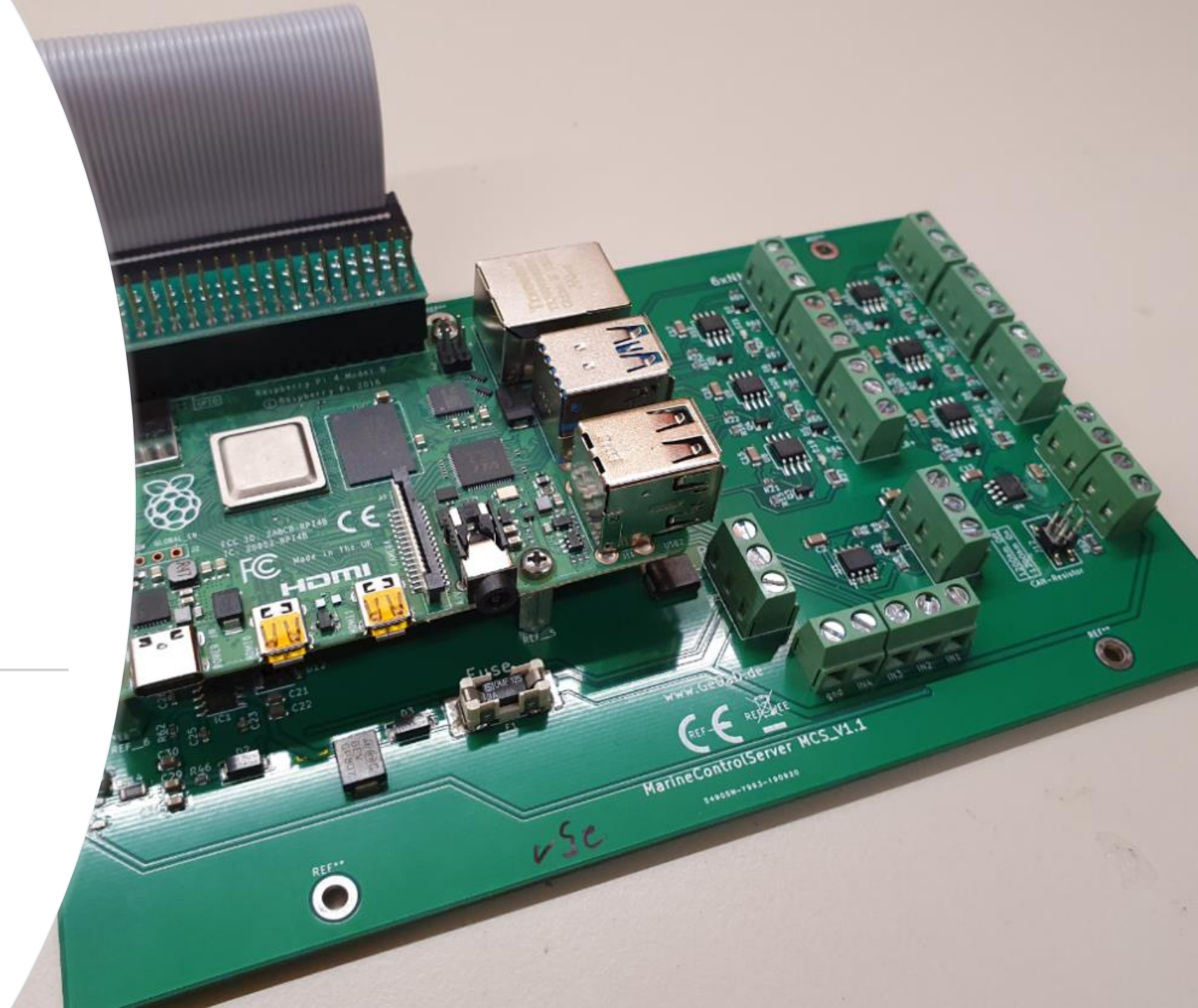
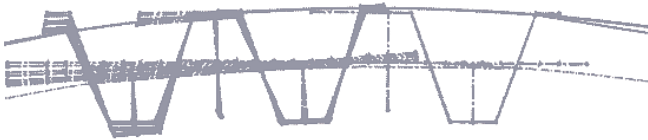


## Quick launch



**Gersmann Development and Design**

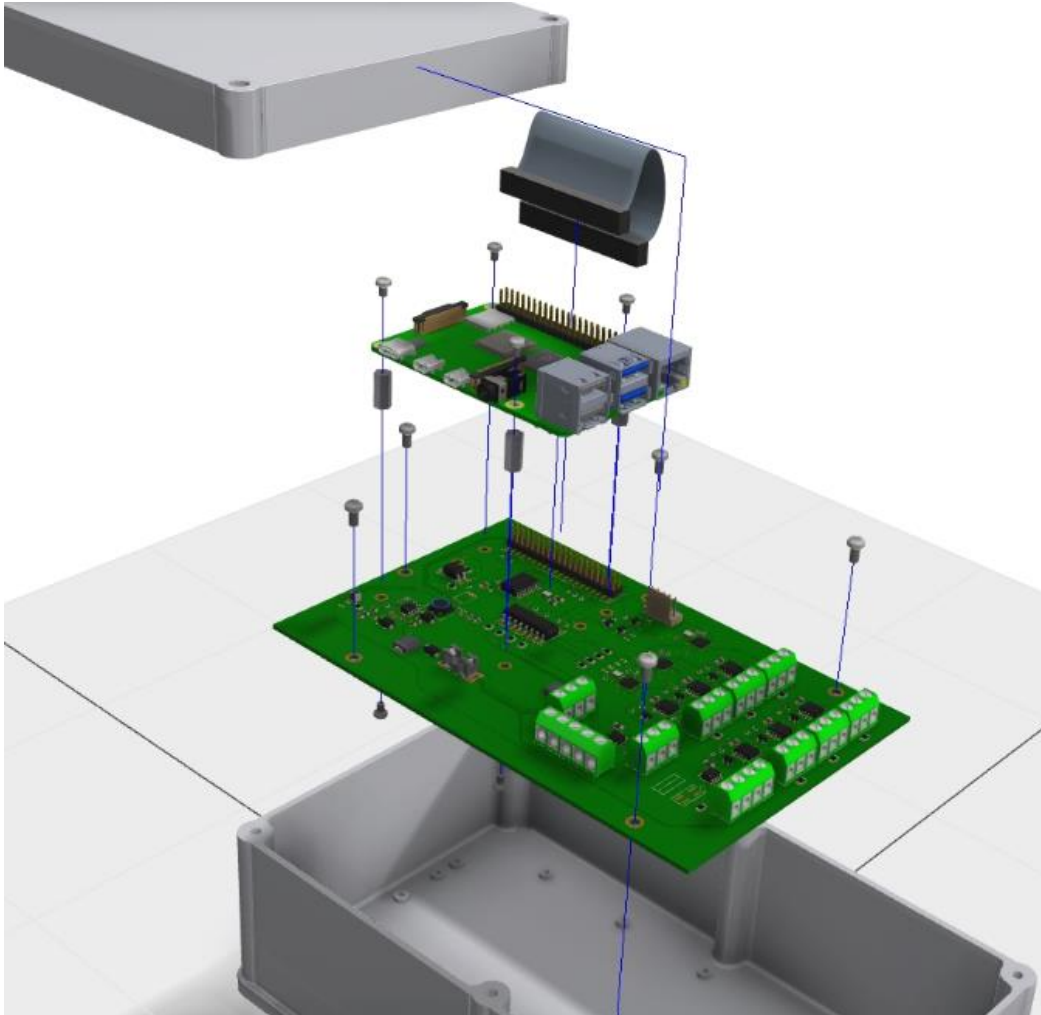


[www.GeDaD.de](http://www.GeDaD.de)

## Key Facts MCS:

- Easy-to-use all-round adapter board for Marine application
- Combines different interfaces
- Usable with Raspberry Pi 4
- Large input voltage range (8-28V)
- Integrated 5V Power adapter
- Autoshutdown for power down Pi and shutdown board
- 6x NMEA0183® compatible interfaces (configurable as input or output)
- 1x NMEA2000® compatible interface
- 1x 1-Wire® interface with real 1-Wire® standard
- 1x 5V tolerant I²C® interface
- 4x digital Inputs
- Ready to use open source app for OpenPlotter

MCS installation view



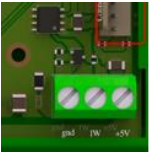
MCS mounted in housing





# Internal scheme

1-Wire® with real 1-Wire®  
(I²C® to 1-Wire®) DS2482-100



DS2482-100

I²C®

I²C®

SC16IS752

SC16IS752

SC16IS752

Uart

Uart

Uart

RS422 (NMEA0183®) 0

RS422 (NMEA0183®) 1

RS422 (NMEA0183®) 2

RS422 (NMEA0183®) 3

RS422 (NMEA0183®) 4

RS422 (NMEA0183®) 5

SPI (CS1)

MCP2515

MCP2562

CAN (NMEA2000®)

I²C

Power supply 12V



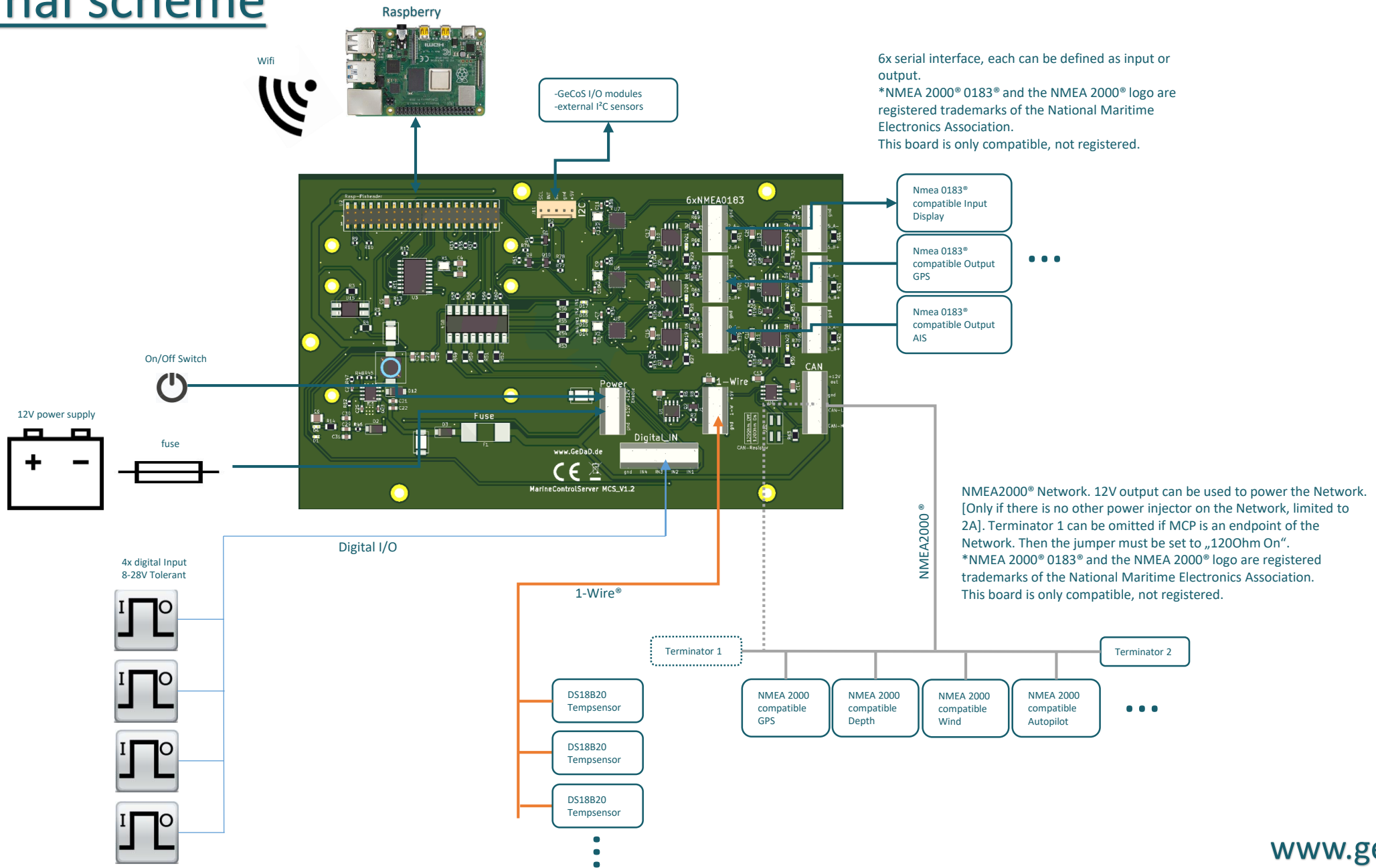
8-28V Input for shutdown  
(high on, low off)

4x 8-28V digital in (optocouplers)

I²C® connector for GeCoS-boards:  
Up to 64 digit. In, 64 digit.

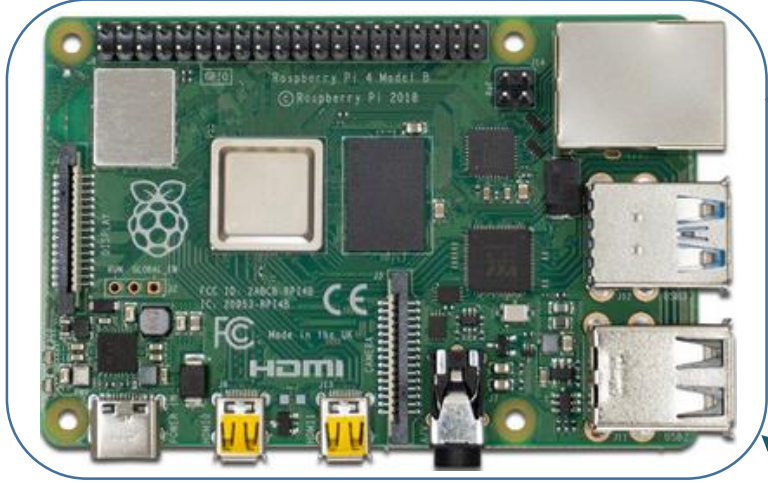
Out 16 analog in (0-10V /0-20mA), 64PWM out  
All 8-28V tolerant, output 400mA  
More Information: [www.gedad.de](http://www.gedad.de)  
Also compatible with external I2C® Sensors

## External scheme

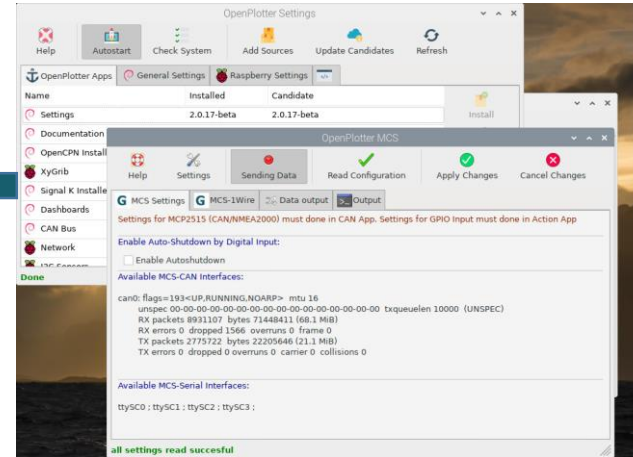


# Software scheme

## Raspberry



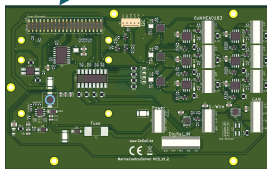
configuration



communication

40 Pin Cable

MCS-board



sensors, actuators // GPS AIS WIND etc.

Supported by:



**“The open-source sailing platform for ARM computers”**  
Openplotter is a great project and is made fully open source. Openplotter handles and configures all necessary resources of the Pi that you need to integrate different Sensors. An App is available with supports the MCS Board completely so all effort to use the board is done by a few clicks.  
Openplotter can handle furthermore features for a great experience with marine application.  
See further Information: <http://sailoog.com/openplotter>

Supported by:



# Signal K

## The Open Marine Data Standard

**A Free and Open Source universal marine data exchange format**

“Signal K is a modern and open data format for marine use. Built on standard web technologies including JSON, WebSockets and HTTP, Signal K provides a method for sharing information in a way that is friendly to WiFi, cellphones, tablets and the Internet. A format available to everyone, where anyone can contribute, Signal K is the first truly open data format for the marine industry and is set to revolutionize how we consume and interact with data on boats.”

For more Information see: <http://signalk.org/>