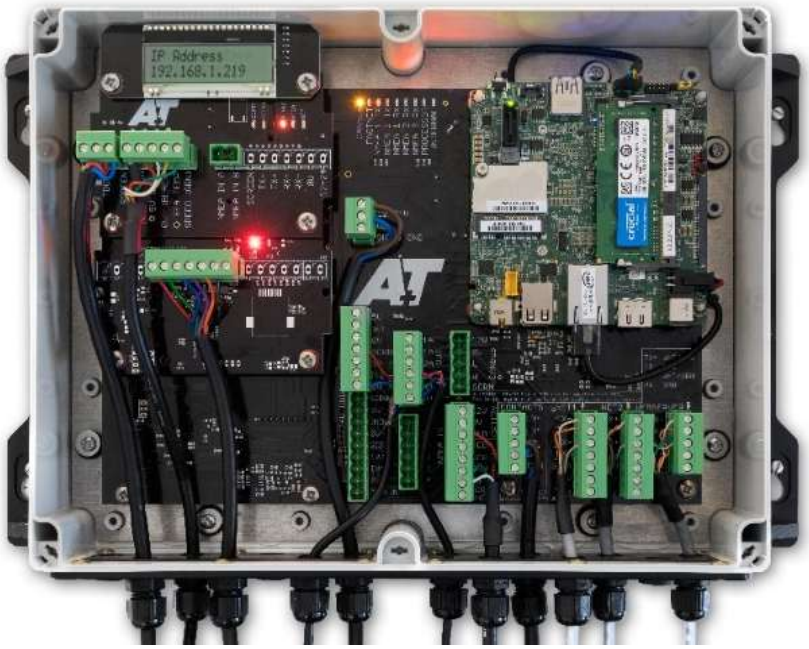
ATP PROCESSOR

ATP Processor is a step forward in instrument performance



- For use with any combination of existing B&G and new A+T displays
- Can use existing Fastnet wiring to keep upgrade costs down
- Ethernet for new cabling, simple and powerful
- CANbus (N2k compatible) for connection to other sensor and systems
- 'Duel Fuel' bus approach allows gradual upgrade

Architecture

The heart of the system is the ATP Processor and motherboard

- Based on Intel Atom CPU running at 1.46 GHz with 4GB of flash drive and GB RAM
- Navigation computation cycle 50 Hz (upgradeable to 100Hz)
- Inputs/outputs:-
  - 3 Serial/NMEA0183 input and 2 output (selectable baud rates)
  - 4 Analogue channels with 5V & 12V reference supply
  - 2 separate alarm relays (e.g. instruments and MOB)
  - 1 NMEA 2000 compatible for sensor input and data output
  - 1 Fastnet connection to support existing B&G displays and sensors
  - 1 Ethernet connection for external computer
  - 2 Ethernet connection for A+T BUS
- All configuration and viewing of internal calculations by webserver on connected computer
- Then separate interface boards are added:- Speed & Depth, Wind, Analogue & Loadcell
- These communicate on a dedicated proprietary Ethernet backbone which runs at up to 100Mbps (note this is 400 times faster than NMEA2000)
- Integral heel & trim sensor and barometric pressure.

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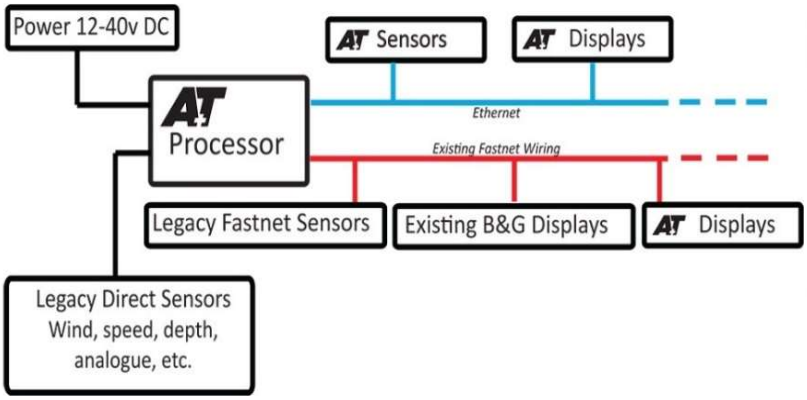

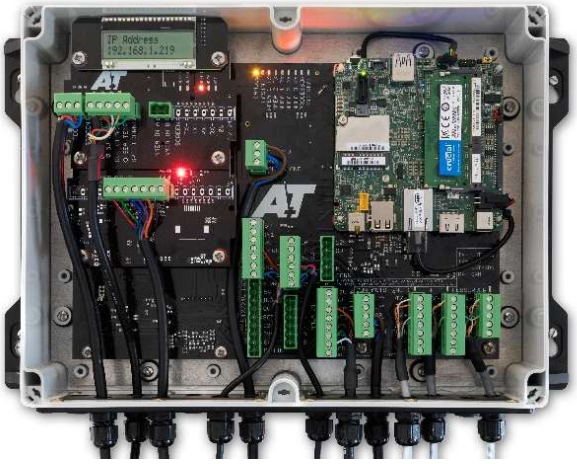

Performance

The initial release outlined below is aimed at the upgrade market from B&G H2000 and H3000 systems and for new yachts for which this level of performance is appropriate

- Fast boot time, less than 20 seconds from power on to full function
- Webserver connection to any computer for all settings, configuration and monitoring of internal computations
- No limit to number of displays that can be connected on system and no practical length limitation on cabling
- Supports any number of external channels from Expedition
- Functions in both True and Magnetic references; internal variation model
- Integral heel measurement allows for heel compensation of wind and leeway model
- Enhanced wind calibration tables & well documented computation schema
- Enhanced current calculations
- Unlimited Loadcell and analogue channels may be added and individually labelled and configured
- Integral Barometric pressure sensor; decimal output of pressure and barograph page
- Custom additions and suggestions welcome

Warranty and support

- 3-year warranty, see details on A+T website
- 24/7 support

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ATP1 Interfacing + Configuration

Speed/Depth Board

Supply voltage and input for a pulse log and sea temperature sensor

Depth board to drive existing 170 kHz transducers. This has settings for minimum depth and gain.

Wind Board

Supply voltage and input for B&G wind sensors

Loadcell Amplifier (DLA2)

1 x Loadcell Amplifier

1 x Analogue Channel with 5v or 12v supply

Analogue

4 x additional analogue channels with 5V and 12V supply (each can be configured separately)

1 x 0-20mA isolated current loop (so also 4-20mA industry standard)

Configuration

A+T provide the Processor in two principal configurations:-

A. Stand alone, existing system upgrade ATP1

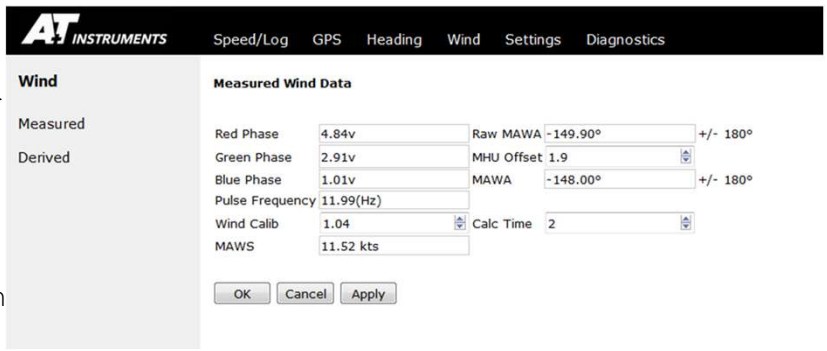
A+T Processor, Speed/Depth board and Wind board in a single enclosure. This is the simplest and tidiest solution when a straight replacement for an existing B&G H2000 or H3000 processor. The sensor cables are already led back to the processor so installation is straightforward.

B. Distributed. for new-build or major refit ATP2

The processor is mounted separately from the interface boards which are in turn mounted close to associated sensors to keep cable runs minimised. The interface boards and displays are linked with the proprietary A+T Ethernet protocol using Power over Ethernet

Hybrid configurations possible for large or specialist installations

Example of Webserver settings and computation page



Example configuration drawings are sh
on the following pages.

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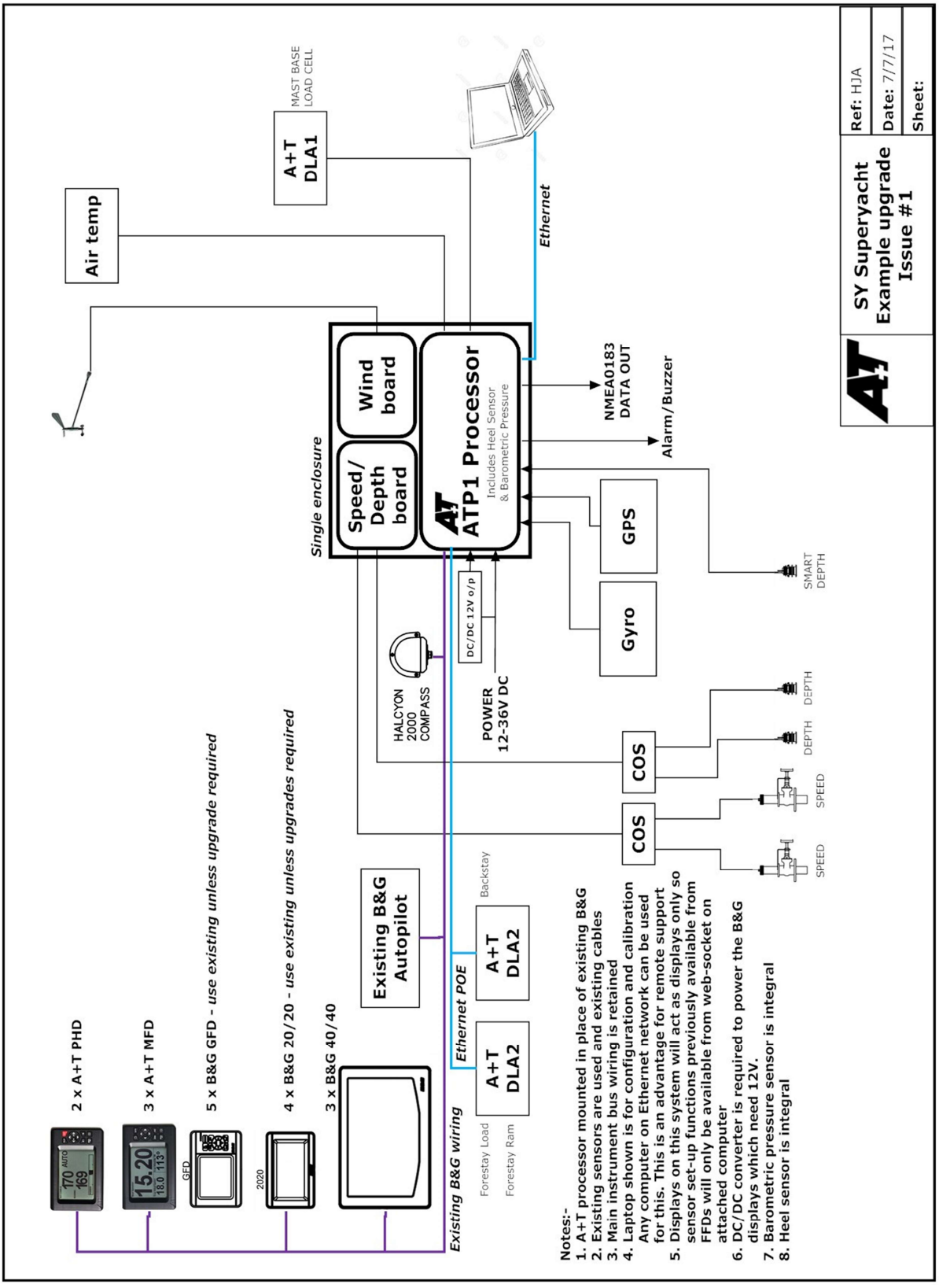

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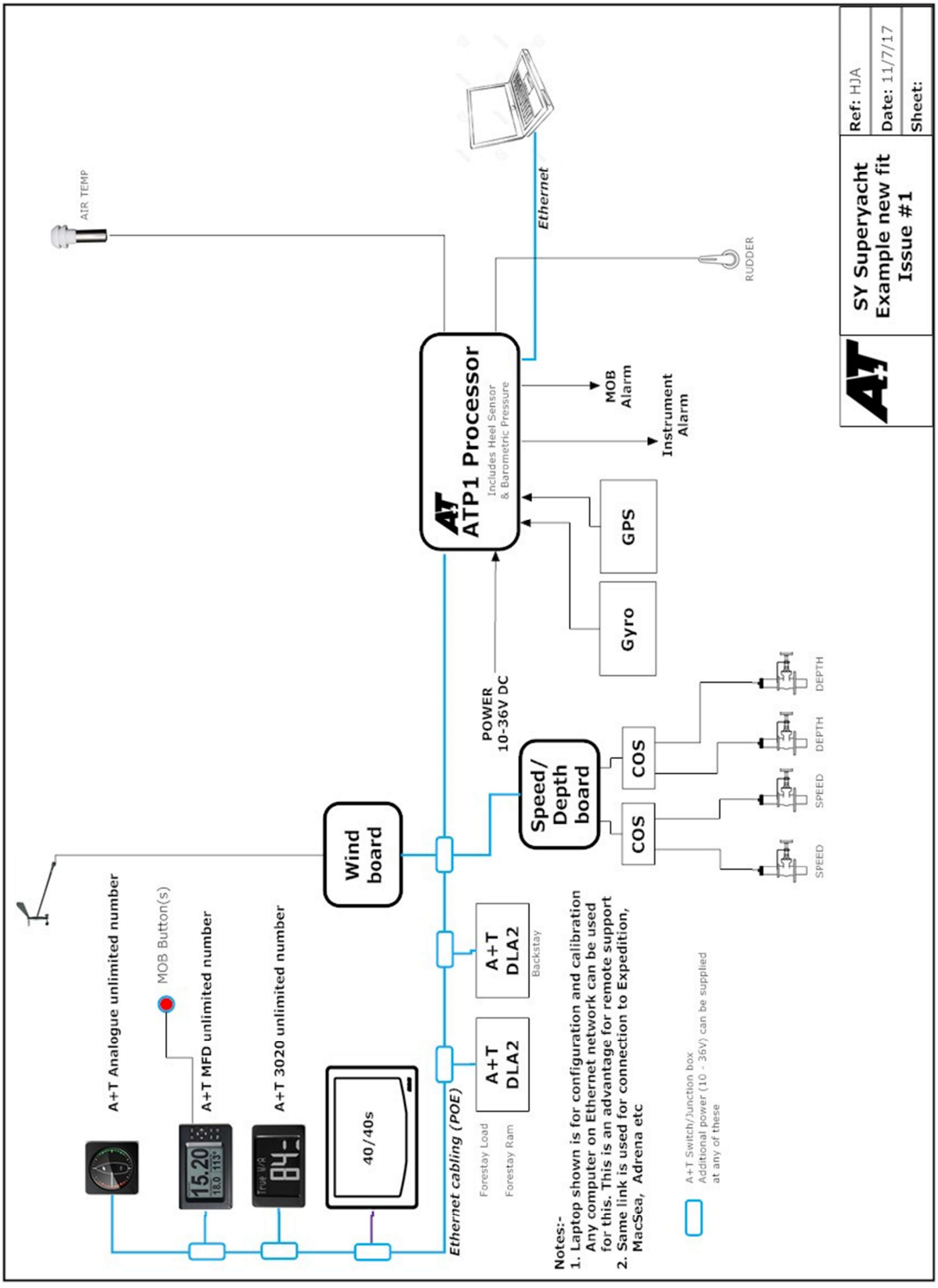

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