VisuShip – Module Overview

Summary of all modules of the VisuShip system, as a quick reference for installers and customers. See the full manual for details.

34 modules at a glance

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VSIO-1 – Digital/Analog Input Expansion

Integrates an additional VSIO1 expansion unit (fixed network address 172.20.20.20) and thereby provides additional inputs/outputs: 2 analog inputs (0–10 V, e.g. for further sensors, calibratable), 6 digital inputs (buttons/switches, with counter and selectable on/off notification) as well as 4 digital outputs (e.g. for relays, either as a permanent switch or as a button with a short pulse – the "on/off" feedback on the screen can come either from the output itself or from any input, e.g. a real limit switch). Every input/output is named by the installer. A real link between an input and an output (e.g. "if input X, then output Y") runs via the dedicated linking module (PLC).

Benefit for the installer: when the system's built-in inputs/outputs are not enough and an additional VSIO1 expansion is fitted.

VSIO-2 – Base I/O of the VSC2 Controller

Unlocks the inputs/outputs built into the housing of the controller itself (no external add-on controller as with VSIO-1): 4 analog inputs (0–10 V, calibratable), 12 digital inputs (each individually invertible, each of which can also be used as an "acknowledge alarm" button) and 8 digital outputs (either permanent switch or button with short pulse, "on/off" feedback either from the output itself or from any input, e.g. a real limit switch). A real link between inputs and outputs runs, as with VSIO-1, via the linking module (PLC).

Benefit for the installer: the base module of the VSC2 controller – here the terminals built into the device itself are named and set up, no additional device needed.

Temperature – 1-Wire Temperature Sensors

Reads in up to 12 digital temperature sensors (1-Wire sensors, either via USB adapter or on the controller's internal connector). Each sensor is recognized by a unique serial number – during learn-in, the setup shows the live value and serial number, and the installer assigns the name (e.g. "Fridge", "Engine room", "Outside"); a "Reset" button releases the assignment again if a sensor is replaced.

Benefit for the installer: the standard route for all temperature displays in the system – fridge, engine room, outside temperature etc., without needing to wire a cable separately for every sensor (1-Wire bus, several sensors on one line).

ShipModul – NMEA0183/NMEA2000 Multiplexer

Receives vessel data (position, heading, depth, wind, engine and battery values etc.) from a ShipModul multiplexer on the network (fixed address 172.20.20.50:10110). The device collects data from NMEA0183 and NMEA2000 sources on board and forwards it together over the network; important here: the ShipModul itself must have pass-through enabled for all NMEA2000 PGNs, otherwise values are missing. No configuration field of its own needed – switching it on is enough.

Benefit for the installer: an alternative to directly connecting individual NMEA sources, when a ShipModul multiplexer is already fitted as the central NMEA interface on board.

NMEA-USB – Direct NMEA0183 Connection via USB

Reads vessel data (position, depth, wind, heading etc.) directly via a USB-serial adapter, instead of via a network device like ShipModul. The installer selects the USB port (listed live from the connected devices) and the baud rate; two lights immediately show whether GPS and depth data are arriving. This is also where a USB GPS mouse is connected, if there is no dedicated GPS/NMEA0183 on board and only the position is needed.

Benefit for the installer: the simplest way to directly connect an existing NMEA0183 wiring setup (classic serial multiplexer or single device) or a USB GPS mouse, without an additional network device.

Victron GX – Central Victron Connection (CCGX/VenusGX/CerboGX/EasySolar-2 GX)

By far the most extensive module in the system: it connects over the network (Modbus TCP, fixed address 172.20.20.40) to a Victron GX device and pulls in all the Victron devices connected to it – not just a display, but with full control.

What the installer sets up:

- GX device type: CCGX, Venus GX, Cerbo GX or EasySolar-2 GX (determines which VE.Direct ports are even available).
- VE.Bus device (hard-wired to the GX, not VE.Direct): none / Multi / Quattro / Skylla. For Multi/Quattro additionally: maximum inverter power (Watts) and maximum shore power limit (A) – together the basis of the current-limiting logic (see below); the inverter power is automatically converted internally into an amp value for this; for the Quattro additionally, which of the two AC inputs is the shore power.
- Up to 3 built-in VE.Direct ports (number available varies by GX type): for each port, the connected device type – battery monitor (BMV), solar charge controller (MPPT), charger, additional inverter, DC-DC converter or alternator regulator. Each port shows live whether data is arriving. (Up to 9 further devices via USB-VE.Direct adapter run through the separate, license-required add-on module "VE.Direct - GX".)
- ET112 energy meter (optional): a second, independent power meter on the GX, e.g. to record a second shore power source separately.

What it provides in terms of control: switching on/off and operating mode (charging/inverting/both) for the inverter/charger, shore power/charge current limiting via buttons (compact or large with a bar display that graphically shows how the set limit is split between the shore power and inverter share – the same technique as with Mastervolt), on/off for all connected chargers/solar controllers/DC-DC converters, a solar detail widget (voltage, current, power, daily/total yield per MPPT) as well as an overall status widget.

Benefit for the installer: the standard connection for any boat with Victron equipment – one module covers battery monitor, solar charge controller, inverter/charger and more at the same time, as soon as they hang off the same GX device.

AIS – Vessel Traffic on the Map

No configuration field of its own – it only unlocks the AIS widgets (reception data comes via the NMEA modules, e.g. NMEA-USB or ShipModul, which integrate the AIS receiver). Provides four widgets: large and small vessel list as well as large and small radar graphic with your own vessel in the center (incl. course/speed over ground).

Benefit for the installer: switch on as soon as an AIS receiver is connected on board via NMEA – shows other vessels in the vicinity as a list or radar display.

Camera – Up to 6 IP Cameras

Integrates up to 6 IP cameras, each with a fixed network address (Camera 1 = 172.20.20.30, Camera 2 = .31, etc.). The installer selects the camera type (currently Vivotek or Foscam models, depending on the model with username/password), an image refresh interval and a name. The camera widget shows an automatically refreshed still image; a click switches (with an active video subscription) to live video.

Benefit for the installer: camera surveillance (engine room, deck, stern etc.) directly in the system, without a separate app. The same building block also contains a simple image widget for your own graphics (e.g. a boat schematic with clickable buttons as an overlay) – usable independently of the cameras.

SMS – Control, Alarms and Emergency Remote Maintenance via SMS

Activates SMS remote control: sets an SMS password with which a phone number can unlock write access via SMS (in addition to the numbers already permanently stored in the system setup). Module-specific commands (e.g. switching outputs) are added by the respective modules; also built in by default are reboot (restart the entire system), update (trigger an update) as well as a dedicated router command space for directly controlling the LTE router (e.g. router restart, router firmware update, status query).

Benefit for the installer: the emergency level for when internet/WiFi is unreachable – SMS only needs mobile network reception. This lets the system (or just the router) be restarted remotely, even when no other connection can be established at all.

VE.Direct - USB – One Victron Device Directly via Cable

Reads in one Victron VE.Direct device (e.g. battery monitor BMV or solar charge controller) directly via a USB cable – with no Victron GX device in between at all. The installer only selects the USB port (listed live from the connected devices). Provides voltage, current, temperature, state of charge, remaining runtime, daily/total yield as well as status/switch state.

Benefit for the installer: the simplest and cheapest connection, when only a single Victron device needs to be read out and no GX device is present/needed. For several Victron devices, or when a GX device is already on board: use "Victron GX" or "VE.Direct - GX" instead.

CAN-Bus – Up to 8 Freely Configurable CAN Bus Connections

A generic CAN bus module, independent of the Victron system. There are 8 connection slots: the controller's internal CAN bus, three further simple (single) CAN hardware modules ("VS-CAN1–3") as well as two dual CAN hardware modules with 2 connectors each, hence the names "Visu-CAN1-1/1-2" (module 1, port 1/2) and "Visu-CAN2-1/2-2" (module 2, port 1/2). Each slot is configured independently.

For each connector, the installer selects a protocol:

- NMEA2000 – standard marine bus, general devices.
- CANopen / custom – requires a special configuration file created per boat (custom programming, not a standard dropdown case).
- Philippi – connection of Philippi tank/electrical system devices.
- Aentron – Aentron lithium battery management (relay status, state of charge, voltage, current).
- Fischer Panda electric drive – specifically for Fischer Panda electric propulsion units (not generators!), up to 2 drives, with its own round-gauge widget (rpm, power, motor/controller temperature).
- SuperB – SuperB lithium batteries (up to 4 units), with a detail widget for all charge/discharge/fault states (overvoltage, over-temperature, fuse etc.).

Benefit for the installer: the go-to point for all CAN bus devices outside the Victron ecosystem. The brand-specific protocols (Aentron, Fischer Panda electric drive, SuperB) are dedicated integrations for exactly those devices; NMEA2000/CANopen/Philippi cover the "normal" cases.

Demo – Simulation Module for Demonstration and Testing

Generates completely simulated onboard values, without any real hardware connected: temperatures, tanks (diesel/water/wastewater), batteries (service + starter), solar (2 sources), wind, 2 alternators, shore power/electrical system (Victron emulation incl. charge/discharge curve depending on SOC), 6 digital inputs (each with its own random switching pattern, incl. notifications), 4 digital outputs, as well as NMEA values (attitude/roll-pitch, wind, depth, compass) and a Mastervolt simulation (MASS Combi Pro, charger, MLI-Ultra battery). All values move on their own (random walk, daily cycle for solar, SOC charge/discharge, etc.), so that "life" can be seen on the screen. A test switch in the setup additionally simulates, live, the switch of the internal Victron data path (old/new), to check software updates.

Benefit for the installer: no benefit of its own on board – a pure demo/test module, e.g. for a trade show stand, training, or a system test without any sensors connected. Should not be active on a real boat, since it also uses namespaces (among others MAV_* for Mastervolt) that would overlap with a real Mastervolt module – which is why the module cleans up all its entries again when deactivated.

GPS-Tracker – Position Logging for visu.world

Records the boat's position and uploads it once a minute for display on visu.world. The tracker has no position source of its own – the prerequisite is that another module supplies GPS (e.g. NMEA-USB, ShipModul, Victron GX). Every logged point contains time, position, course over ground, speed over ground, as well as the smallest water depth measured since the last point (from NMEA depth data, if available). If the boat is practically stationary (<1 kn), a new point is only written every 25 m, so as not to unnecessarily fill up the log while the boat is lying still. The points are collected locally and transmitted to visu.world via upload (access data from the VisuWorld cloud account set up during onboarding, not module-specific); after a successful upload the local file is cleared.

The setup itself only shows a GPS status light (green = position available) – there are currently no real settings in the installer setup.

Benefit for the installer: activate when the customer wants to see their position/journey on visu.world (e.g. fleet/charter tracking). Requires an existing VisuWorld cloud account and a GPS-supplying module.

Charging Automation – Automatic Charge Switch Based on Battery State

Automatically switches a freely selectable output on and off, depending on the state of a selected battery. As the target, not only a physical relay output (VSIO/VSIO2) is available for selection, but any output named in the system – including software switches of other modules, e.g. the charger on/off of a Victron or Mastervolt device. This is a distinctive feature of VisuShip: it lets you, for example, automatically switch a Victron or Mastervolt charger on/off purely based on battery state, without an additional relay. The module itself also acts as its own "virtual output" with an on/off switch (incl. power-on-after-outage behavior like normal outputs); only when this main switch is active does the module monitor the battery.

What the installer sets up:

- Name of the automation
- Battery whose state is monitored (state of charge SOC, and – if available – voltage)
- Target output to be switched (physical relay output or software switch of another module/device)
- SOC min/max (%) – switches on when the state of charge drops below "min", switches off again when it rises above "max" (hysteresis)
- Voltage min/max (V) – same logic based on the battery voltage, as long as a voltage measurement is available for the battery

Both conditions (SOC and voltage) act independently as a reason to switch on – the output stays on as long as at least one of them is "low", and only switches off again once both are in the upper range.

Fail-safe: if the battery delivers neither state of charge nor voltage for more than 60 seconds, the automation switches the output off as a safety measure instead of charging blindly.

Benefit for the installer: a simple automation to have a battery recharged automatically when its state of charge is low – either via a relay or directly through the software control of a connected charger – without the customer having to intervene themselves.

Temperature Automation – Thermostat Control (Heating/Cooling)

Automatically switches an output to keep a selected temperature sensor (from the temperature module) at a setpoint – either as a heating or a cooling control. As with the charging automation, the target output is not just a physical relay, but any output named in the system, including software switches of other modules.

What the installer sets up:

- Name
- Temperature sensor as the source
- Target output
- Mode: heating or cooling
- Run-on time (off / 1 / 5 / 15 / 30 min) – minimum run time: the output stays on for this long after reaching the setpoint before switching off
- Hysteresis (off / 0.1 / 0.25 / 0.5 / 1 °C) – tolerance band around the switching threshold, against too-frequent on/off switching at the setpoint

The setpoint temperature value is additionally available as its own widget on the dashboard – the customer can change the target value there directly with +/- buttons (0.5 °C steps) or via an input field, without having to go into the setup.

Fail-safe: if the temperature sensor delivers no value for more than 60 seconds, the automation switches the output off as a safety measure.

Benefit for the installer: a ready-made thermostat automation for heating or cooling relays (e.g. underfloor heating, diesel heater enable, cooling unit/fan), linked to any temperature sensor in the system – including a setpoint widget the customer can operate themselves.

Voltage Monitoring Automation – Threshold Switch for an Analog Voltage

Switches a freely selectable output (relay or software switch of another module) on/off, depending on the value of any analog input (e.g. a VSIO analog input or a battery voltage). Unlike the charging automation, this automation is not based on a battery with a state of charge (SOC), but purely on a voltage value – which makes it usable for any 0–10 V analog signal, not just battery voltages.

Two switching values ("on"/"off", in volts) set the switching threshold with hysteresis; depending on which of the two values is larger, the automation works in either direction:

- "On" smaller than "off": switches on when the value drops below "on", switches off again when it rises above "off" (e.g. undervoltage warning/shutdown).
- "On" greater than or equal to "off": switches on when the value rises above "on", switches off again when it drops below "off" (e.g. response to overvoltage).

This module too acts as its own switchable output with a main switch – only when this is active does the automation evaluate the analog input.

What the installer sets up:

- Name
- Analog input as the source

- Target output
- On voltage / off voltage

Benefit for the installer: a universal threshold switch for any analog value in the system – e.g. undervoltage protection for a load, or a threshold response to an analog sensor, without a dedicated relay being needed for it.

FURUNO – VisuShip Display on Furuno TZtouch Chartplotters

Connects the VisuShip computer via a second, fixed network interface (172.31.201.15, Furuno's own NavNet subnet) into the Furuno network, so that the VisuShip system can be displayed directly as an app on a Furuno TZtouch multifunction display (MFD). No configuration field of its own – just switch it on; however, it does require an additional physical network connection to the Furuno NavNet switch/plotter, separate from the normal VisuShip network. It also requires the separate "VS Furuno Kit" (additional hardware/license from Furuno's side).

Benefit for the installer: for boats with Furuno TZtouch plotters, when VisuShip should also be visible on the chartplotter itself, rather than only on VisuShip's own screen.

VC Add-On Modules (VC_ADD) – Additional Sensor and Battery Data from the Victron GX Device

Unlocks three additional, hard-coded data sources on the Victron GX device that the normal Victron GX module does not query itself:

- 6 additional temperature/humidity sensors (VRM device instances 21–26; barometric pressure only via instance 21)
- 6 additional tank sensors (instances 27–32)
- the data from a Lynx Shunt/Lynx Smart BMS (device instance 100) as a full battery source: current, state of charge (SOC), amp-hours, remaining runtime, switch/fault state as well as minimum/maximum cell voltage and temperature

The typical use case is a LYNX Smart BMS (NG) patched into VE.CAN 1 of the Cerbo/GX. The mapping of the physical sensors to the instance numbers happens directly on the GX device itself, not in VisuShip. No configuration field of its own in VisuShip – just switch it on; requires an already set-up Victron GX module. The unlocked temperature, tank and battery values are then available as usual in the respective selection lists (widgets, other modules).

Note: device instance 30 is used both for a tank (this module) and for the optional ET112 energy meter in the GX module – both must not be set to the same instance at the same time.

Benefit for the installer: unlocks additional temperature, tank and Lynx Shunt battery data from the GX device that would otherwise not be available.

Generator & Engine (GENAUTO) – Generator Autostart + DCDC Charging Automation

Contains two independent automations that only share the file:

1. Generator charging automation – automatically starts/stops up to 4 generators based on the state of charge (SOC) of a selected battery.

- Type per generator: *Switch* (simple on/off output), *Onan* (classic pulse start/stop: separate start and stop output, 20 s pulse to start, 5 s to stop) or *Fischer Panda* (start/stop runs via CAN bus on the Victron GX device instead of via a relay, requires its Modbus device address).
- "Generator running" feedback is explicitly selected per generator, never automatically derived from the type (e.g. when a contactor is wired ahead of a MASS Combi): digital input, Victron Quattro AC input 1/2, Mastervolt MASS Combi Pro generator channel, or Fischer Panda CAN status.

- Without configured feedback: with Onan, nothing happens automatically (a blind pulse without confirmation would be too risky); with Switch/Fischer Panda, the automation continues to switch blindly based on SOC (old behavior).
- With feedback: robust start/stop logic with retries (max. 3 attempts) and an alarm (SMS/list/email/push) if the generator, according to the feedback, does not start or does not stop – prevents endless re-triggering with a faulty sensor.
- On/off SOC thresholds as well as the automation itself (on/off) are additionally operable directly from the customer dashboard (its own widget); a second widget offers a plain start/stop manual button.
- Its own runtime hour counter per generator.

2. DCDC charging automation – switches up to 4 independent DC-DC converters (relay or software switch, e.g. a Mastervolt DC-DC) automatically on/off, depending on whether the boat is underway:

- Source per instance: GPS speed (SOG) or engine rpm (up to 4 engines, from NMEA engine data).
- On/off switching threshold (knots or rpm) with hysteresis, plus debouncing (1 minute above the threshold before switching on, 2 minutes below before switching off) against short cycling.
- Safety shutdown: if the source is missing (no GPS fix, NMEA bus dead) for longer than 1 minute, the automation shuts off as a safety measure, rather than unknowingly draining the starter battery.
- A single-button widget for the customer to switch the automation on/off; everything else (name, output, source, thresholds) sits in the installer setup.

Benefit for the installer: covers two of the most common onboard automations completely – automatic generator start/stop based on battery state (for practically any common generator type) as well as automatic engagement of a DC-DC charging converter as soon as the boat is underway or the engine is running – both including fail-safety (retry/alarm or emergency stop on data loss).

Energy Flow Diagram – Free-Form Energy Flow Diagram

Provides small connector-piece widgets (crossing/T-piece in green, blue or orange, as well as a variant with a switch symbol), with which you can assemble your own, free-form energy flow diagram on the dashboard – similar to a single-line wiring diagram made of individual component tiles. Each tile has 4 connection points (top/left/right/bottom); for each connection, any battery/power source in the system is selected. If current is currently flowing at a connection (not equal to 0), the corresponding line is colored and shown as an active flow with a small animation – several tiles next to/below one another thus form a connected, animated energy flow image.

In addition, the module creates a "Vessel" entry as a completely normal battery source (total current/voltage of the electrical system, as calculated elsewhere in the system), which is then selectable everywhere else batteries are also selected.

No configuration field of its own in the installer setup – the assignment of the 4 connections happens directly on the respective widget when placing it on the dashboard.

Benefit for the installer: for customers who want a visual overview of their energy system (which source feeds where) – freely composable instead of a fixed, predefined diagram.

Mastervolt – Mastervolt Masterbus Connection (RS485)

The second major "system module" alongside Victron GX: connects a complete Mastervolt Masterbus system via RS485 (USB Masterbus converter), with full control rather than just a display. Unlike Victron (one central GX device supplies all the sub-data), VisuShip here addresses each Mastervolt device individually via its own bus address (IDB) – only the devices that are activated in the setup and given an IDB are queried at all.

Basic setup:

- Baud rate (9600/19200/115200) for the RS485 connection.
- Inverter power (Watts) and maximum shore power (A) – together the basis for the current-limiting logic (see below).

- One checkbox per device type to activate it, then a quantity (0 up to the maximum per type) and, for each individual device, the IDB bus address. The IDB is not determined in VisuShip, but read out via Mastervolt's own MasterAdjust software (connect USB Masterbus converter, open the software, click the device → right-click → Property → IDB value) – a clear hint text about this is right in the setup.

Supported devices (up to 10 types at once, each with its own maximum count):

- Combimaster (2×) and Combimaster old (2×) – inverter/charger combo units, each with a 24 V side, AC input and output, status, charge current limit, charger/inverter individually switchable.
- MASS Combi Pro (2×) – like Combimaster, additionally with a generator input (its own channel, usable among other things by the generator module as a feedback source) and cluster support: several physical devices that work together as one large virtual device – for this, additional slave-IDB fields, so that the second AC output (AC OUT 2) is correctly summed across the master and up to 4 slave devices.
- Charger (4×, with a selectable subtype per device: Chargemaster, Chargemaster old, Chargemaster-Plus, MASS-Charger) – pure chargers, since the register layout differs by subtype.
- MLI Ultra (battery, 8×) – lithium battery system; can be switched on only via software, never switched off (hard-locked in code, a safety measure).
- MasterShunt (2×) – battery monitor (SOC, current, remaining runtime).
- Alpha PRO (2×) – alternator regulator.
- Mac Plus DCDC (4×) – DC-DC converter.
- MASS GI ISO 7 and MASS GI ISO 3.5 (2× each) – isolation transformers, incl. switchable fuse.

What it provides in terms of control (dashboard widgets):

- A generic on/off switch for every switchable device/function (e.g. charger, inverter, combi master switch) – with a safety confirmation before switching off; for MLI-Ultra batteries, "off" is completely locked in the control.
- Shore power/charge current limiting via buttons (compact or large with a bar display) that graphically shows how the set limit is split between the shore power and inverter share – analogous to the current limiting on Victron GX.

All Mastervolt devices enter their values into the same namespaces as any other battery/temperature/output in the system (MAV_*) – they therefore automatically appear in the selection lists of other modules (e.g. as a battery source for the charging automation, or as a feedback source in the generator module).

Benefit for the installer: the standard connection for any boat with Mastervolt equipment – functionally the counterpart to Victron GX, with full access to practically the complete Mastervolt device lineup (inverter/charger, lithium batteries, battery monitor, alternator regulator, DC-DC converter, isolation transformers) over a single RS485 connection.

Energy Detail Widget – Configurable Energy Overview Widget

A single, very flexible dashboard widget for the overall view of the energy system. It is available in 4 sizes (smallest to largest variant, selectable directly on the widget, only sizes that still have room are offered) as well as specially adapted, compact variants for the mobile view.

The widget consists of 3 to 8 equal-ranking device "slots" (depending on the chosen size), which are assigned directly on the widget via a gear icon to any source in the system – each slot can be either an energy source (e.g. solar, alternator) or a consumer, which is derived automatically from the current direction of the assigned device. Each slot shows, besides current, voltage and power, the status and fault of the respective device, and offers, where available, a software switch to turn it on/off. The sum of all assigned slots is shown in the central "vessel current" field. The same source cannot be assigned twice (built-in protection).

The lower three slots additionally and permanently depict the 230 V AC section: shore power/generator (input) – inverter/charger (Quattro, Combi or another charging/inverting device, incl. mode buttons Charge Only/Invert Only/On/Off) – 230 V vessel power (output).

The gear icons for reconfiguring are only visible with a sufficient login level – the customer only sees the finished display, not the configuration.

No configuration field of its own in the installer setup – everything happens directly on the widget once placed.

Benefit for the installer: the most extensive, freely adaptable energy overview in the system – DC sources and consumers plus the complete 230 V section (shore power/generator → inverter/charger → electrical system) in a single, size-adjustable widget, including status/fault display and switching

capability per device.

Calculation – Summation Buses (Battery/Tank) & Free Runtime Hour Counters

Provides three independent "calculation" functions that operate across all modules:

Current summation buses (up to 20): any batteries/power sources in the system can be assigned (on the respective battery itself in the system setup, not here) to a shared "bus". For every active bus, a completely normal, new virtual battery source is created ("calc1" … "calc20") with summed current, summed power and summed daily yield of the assigned sources (voltage is displayed, not summed). Here in the module you only set how many such buses are available at all (0–20).

Tank summation buses (up to 5): same principle for tanks – assigned tanks (assignment also in the system setup) are combined into a shared virtual tank source with total liters and a calculated total fill level in %.

Runtime hour counters (up to 20, freely configurable): each counter gets a name and any source as a trigger – any digital input, any digital output or any insulation monitor status in the system (not just engine/generator). As long as the selected source is "active", the hour count runs up. The hour reading is directly editable (e.g. to reset when a device/engine is replaced) and can be reset to 0 with a button; additionally, a maintenance interval (hours) can be stored per counter.

Benefit for the installer: covers two recurring special requests that no other module can – showing several battery banks/sources or several tanks as a single combined total, as well as setting up a dedicated runtime hour counter with a maintenance interval for practically any input/output in the system, without a special device being needed for it.

Timer – Time Switch (Up to 12 Channels)

Automatically switches up to 12 arbitrary outputs on and off by time of day – a classic time switch, either with fixed times or linked to sunrise/sunset (calculated from the vessel's own position).

What the installer sets up: number of timers (0–12), per timer a name and optionally a target output, as well as, for each on and off time, a checkbox for "sunset" or "sunrise" instead of a fixed time. Times spanning midnight (e.g. 20:00–06:00) are handled correctly.

Its own signal per timer: in addition to the direct target output, every timer automatically gets its own virtual output ("[Name] Signal"), which only reflects the schedule state – selectable as a normal source in the linking module (PLC). This lets the schedule be combined with further conditions (e.g. "on at night, except when the gangway is open"), without the timer and the PLC overwriting each other when writing to the same output. The target output may be left empty for this – the signal is created regardless.

Customer-facing control: two dashboard widgets per timer – a combined tile with a manual switch (output directly on/off by hand) and a separate automation switch (time control on/off), as well as a second tile for directly entering the on/off time (shows a sun symbol instead of a time entry when linked to sunrise/sunset).

Manual override: if an output is switched by hand in between (widget, PLC etc.), it stays in that state until the next regular on or off time – the timer does not keep switching against it. This works in both directions (switched off in between stays off, switched on in between stays on).

"On at dark": a brightness sensor can additionally be selected as the on-trigger (e.g. the Shelly Wall Display, see Shelly module). The timer then switches on as soon as it gets dark and off again at the set time – e.g. "on when dark, off at 23:00". The lux threshold can be set in the setup and directly in the timer widget.

Benefit for the installer: a simple, universal time switch for any load (lighting, fans etc.) – including sun-position linking and, via its own signal, cleanly combinable with further conditions via the PLC.

Voltage Switch-On – Automation "Output Follows Voltage" (Up to 4)

Similar to the voltage monitoring automation, but simpler: up to 4 independent instances, each mirroring an analog value (e.g. whether a voltage/signal is present on an input) 1:1 onto an output – if the selected analog value is above the set minimum voltage, the output is switched on; if it drops below, it is switched off again. Only one threshold, no hysteresis and no separate off value.

What the installer sets up: quantity (0–4), per instance a name, an analog input as the source, a target output, minimum voltage ("switch on above").

Here too, each instance additionally acts as its own switchable output with a main switch – the automation is only evaluated when the main switch is active.

Benefit for the installer: a simple "output follows voltage" link, e.g. to automatically enable a load only when voltage is present at a certain point (such as shore power or another signal) – leaner than the voltage monitoring automation when no hysteresis/two thresholds are needed.

Onboard Mode – "Onboard" Switch for Alarm Muting

Creates a single virtual switch in the system ("Onboard mode"). No configuration field of its own in the module itself – the actual effect comes from being able to set a "mute when onboard mode" checkbox individually for every digital input in the system setup. If the onboard-mode switch is active (crew on board) and an input is marked this way, its alarm messages (SMS/email/push/list) are suppressed; if onboard mode is off (boat left unattended), they are sent as normal.

Benefit for the installer: a simple way to spare the customer from constantly getting alarm messages on board for known/expected events (e.g. a particular door/hatch), while the same messages still reliably arrive as soon as the boat is actually left/unattended.

VE.Direct - GX – Additional Victron Devices via USB (Up to 9)

License-required add-on module to the Victron GX module: expands the (usually only 2–3) built-in VE.Direct ports of the GX device by up to 9 further Victron devices, connected directly to the GX device (Cerbo) via USB-VE.Direct adapters. Each of the 9 USB slots is assigned a fixed VRM device instance (231–239) and a selectable device type: battery monitor (BMV), solar charge controller (MPPT), charger, inverter, DC-DC converter or alternator regulator. A DATA light shows live per port whether data is arriving – just like the built-in ports in the Victron GX module. The device instances themselves must be configured on the Cerbo, not in VisuShip.

Requires the Victron GX module to already be active and set up (uses the same configuration/the same namespace).

Benefit for the installer: when more Victron VE.Direct devices are fitted than the GX device has ports of its own – up to 9 additional devices via simple USB-VE.Direct adapters instead of a second GX device or special Modbus solutions.

CZONE – Connection of CZone Switching Modules (NMEA2000)

Integrates up to 8 CZone switching modules (Navico/B&G digital switching system) via NMEA2000. Unlike normal relay outputs, there is no fixed wiring here – each CZone module provides up to 12 switchable "scenes", which are transmitted to the CZone system via NMEA2000 telegram (max. 12 per module, due to protocol constraints).

What the installer sets up: per CZone module (1–8) its own name as well as the number of scenes actually used (1–12); a name for each scene used. Each named scene thereby becomes a completely normal, switchable output in the system (namespace "nmea-module-scene") and thus appears everywhere else outputs are also selected (widgets, charging-automation target output, etc.).

Benefit for the installer: the standard way to integrate an existing CZone digital switching system into VisuShip and operate its scenes/circuits like completely normal VisuShip outputs, without any wiring of its own – only the NMEA2000 connection is needed.

NMEA Wide Widgets – Depth/Wind/Heel History

Bundles four related display widgets, merged together from several older individual files, for history and extreme values from NMEA data:

- Depth history – bar chart of the last 2 minutes of water depth (incl. current depth and speed as a number), with an adjustable danger depth (red) and safety depth (orange) as colored thresholds in the chart.
- Wind history + wind radar – history chart of wind speed (maximum/average value) as well as a radar display of wind direction; automatically calculates true wind (direction/speed) from apparent wind plus the boat's own speed if needed, if the wind source only provides apparent wind.
- Pitch/roll – live display of trim (pitch) and heel (roll) with a permanently tracked minimum/maximum value.
- Roll min/max/amplitude – three simple tile widgets with the current roll minimum, maximum and the amplitude calculated from them (range of variation); the extreme values slowly "recover" back towards the current value, so that they show the more recent sea state rather than the values from the start of the trip.

Special feature: unlike most modules, the source selection and thresholds (depth, wind, pitch/roll, roll) are not in this module's own installer setup, but under System Setup → Extensions.

Benefit for the installer: complements the simple NMEA displays with history and extreme values for depth, wind and sea state (heel/trim) – useful e.g. for shallow-water warnings with a history, wind trend while sailing/anchoring, or to see how much the boat has actually rolled.

Linking (PLC) – Freely Wireable If-Then Rules

A small but very powerful "linking module" ("classic PLC linking"): up to 8 free if-then rules, with which any states in the system can be logically linked to each other, without real wiring.

Principle of a rule: input 1 (optionally + input 2) → logic → output.

- Logic types: DIR (output follows 1:1), INV (inverted), AND (both inputs must be active), OR (either one is enough).
- Literally anything that exists in the system as a 0/1 state counts as an "input" – not just physical inputs (VSIO, alarm messages, etc.), but also any software/output state of another module: onboard mode, a Victron state, a Mastervolt DCDC state, another timer output, etc. The module is deliberately "hardware-blind" – it doesn't know device types, only 0/1 values.
- Any named, switchable output in the system counts as a target output – a physical relay or software switch of another module, exactly as with the charging automation.
- Multi-stage devices (Victron Multi/Quattro, Mastervolt Combimaster/MASS Combi Pro) are deliberately not selectable either as a source or as a target, since they don't provide simple 0/1 states.

Behavior: rules are re-evaluated every second, but only actually switched when the calculated target value has actually changed – this keeps network traffic (e.g. CZone/NMEA2000, Victron/CAN) low and respects a manual override via a widget, as long as the underlying input doesn't change again.

What the installer sets up: number of active rules (1–8); per rule a free name, input 1, logic, for AND/OR a second input, and the target output. The active switch of each rule is its own output and can therefore be operated directly on the dashboard (instead of a checkbox in the setup).

Benefit for the installer: the central place to link modules/devices in software that otherwise know nothing about each other – e.g. "if onboard mode is off AND an input is active, switch the alarm output" or "output X follows input Y inverted" – without real wiring and without a dedicated Lua script, directly in the setup.

WAGO – WAGO 750 I/O Coupler (Modbus TCP)

Integrates a WAGO 750 Ethernet coupler with up to 5 supported terminal types via Modbus TCP (default address 172.20.20.70, IP/port changeable in the setup):

- 750-430 – 8 digital inputs 24 V (P-switching)
- 750-1407 – 16 digital inputs 24 V (N-switching)
- 750-1504 – 16 digital outputs 24 V (P-switching)
- 750-483 – 2 analog inputs 0–30 V (differential)
- 750-494 – 3-phase power measurement (voltage/current/power per phase L1–L3 + total power, frequency, energy meter per phase)

What the installer sets up: IP address and port of the coupler, a checkbox per required terminal type to activate it, then a freely chosen name per channel (analogous to VSIO). Every named digital input/output thereby becomes a completely normal input/output in the system, including the usual on/off notifications for inputs.

Special feature: unlike most modules, changes in the setup are not applied immediately, but collected; only the "Save + Restart" button applies them (with a notice about unsaved changes).

Benefit for the installer: the standard way to integrate a WAGO 750 I/O assembly (e.g. for lots of additional inputs/outputs or a genuine 3-phase shore power measurement) into the system, without needing VSIO modules for it.

Weather – Weather Forecast (Open-Meteo)

Retrieves weather and marine weather data from Open-Meteo (a free service, no API key needed) – current values, a 48-hour and a 7-day forecast, as well as separately wave data (wave height/direction/period, swell) via the same provider's Marine API. Queried every 30 minutes (fixed in the code, no setup field).

Two independent locations possible at the same time: each placed weather widget chooses for itself whether to show the vessel's own GPS position or a manually entered destination (by name, automatically converted into coordinates) – e.g. one widget with the current location and, at the same time, another with the weather at the planned destination. For the GPS location, a place name is additionally determined automatically (reverse geocoding), cached, and only re-queried after significant movement.

Three widget sizes: a small compact display, a medium one with a short preview, as well as a large variant with a full 7-day and hourly forecast incl. sea state. Wind speed in your choice of km/h, knots or m/s; wind force is correctly calculated according to the real Beaufort scale (knot thresholds, not the sometimes inaccurate km/h values used in other modules), including regional wind names (e.g. Meltemi during the summer season in Greece).

Storm warning: automatically detects when gusts above the storm threshold appear in the hourly forecast (default 62 km/h, approx. Bft 8; the threshold is entered in Beaufort in the setup) and shows this as a note in the widget. In addition, depending on the alarm channels selected in the setup, the warning triggers a push, SMS, email or alarm-list message – it is no longer display-only.

No installer setup of its own needed – everything (source, unit) is set directly on the respective widget.

Benefit for the installer: a weather forecast directly in the system, without an extra subscription or a dedicated device – including marine weather/waves and an optional view of the destination weather, not just your own position.

Shelly – Integrating Shelly Devices via Network

Integrates Shelly devices of generation 2 and newer via the local network (no cloud, no extra hardware). The module finds the devices through a network scan, lists them in a table and makes them available throughout the system like normal outputs, sensors and inputs – in widgets, in the timer and in the linking module (PLC).

Supported devices:

- Shelly 1PM, 1 mini, 1PM mini, 2PM and Plug: switching outputs (relays or socket) with power measurement where the device provides it; the 2PM provides two channels. The measured power and the device's energy counter can be used in the Energy meter module.
- Shelly Wall Display: switching output, temperature (if the device's sensor delivers values) and brightness. The brightness is available as a "Dark" input with an adjustable lux threshold – usable in the timer ("on at dark") and in the PLC.
- Shelly Dimmer (0/1-10 V Gen3 as well as Pro/Plus RGBW in light profile): continuously dimmable outputs with the dashboard widgets "Dimmer", "Dimmer double" and "Dimmer with buttons".
- Shelly H&T (battery temperature sensors): push their values actively to VisuShip via webhook (port 8099). They do not count towards the device limit.

Setup: start the network scan in the install setup – newly found devices appear at the top of the table, assign names, then "Save + restart". If a device's IP address changes (e.g. via DHCP), VisuShip finds it again on its own via the MAC address. Unreachable devices are marked offline in the table and flagged as a warning in the daily report.

Limit: the Monitoring version supports up to 8 Shelly devices, the Pro version has no limit.

Benefit for the installer: inexpensive, quickly retrofitted switches, dimmers and sensors without wiring to the controller – including dark-based control via the Wall Display and monitoring of reachability.

Energy meter – kWh Counters for Shore Power, Generator and Shelly Loads

Counts energy consumption in kWh and shows it on a tile with total, daily and yearly value. Up to 10 meters are possible. Each meter gets a source and a name; the name of the source is suggested automatically, for Shelly the one given in the Shelly module.

Possible sources:

- Victron Quattro/Multi: shore power or generator, depending on which AC input is set as shore power in the Victron module.
- Any source with a power value, e.g. an ET112 energy meter for a second shore power input.
- Shelly devices with power measurement (Plug, 1PM, 2PM): VisuShip takes over the device's own energy counter. If the WiFi or VisuShip is briefly down, nothing is lost.

Total is reset by hand, the yearly value rolls over automatically on 1 January and the daily value at midnight. From 10,000 kWh the tile shows MWh. The total can be preset in the setup, e.g. to carry over an existing meter reading.

The tile shows name, current power, total and a second line (day or year). The customer chooses the meter and the second line directly via the source selection button in the menu.

Benefit for the installer: shore power and consumption meters without extra hardware or scripts, also included in the Monitoring version.