

PRODUCT INFORMATION

VL DIGITAL

Outdoor Instrumentation Engineered in Switzerland



VL DIGITAL – SMART, PRECISE, FLEXIBLE.

Experience the next generation of instrumentation with VL Digital—where precision meets innovation. Designed for versatility, it combines high-performance digital technology with intuitive features like customizable displays, multiple input options, and smart connectivity. Whether for advanced monitoring or seamless integration, VL Digital offers a modern, user-friendly solution for a wide range of applications.



Precision meets intelligence – VL Digital puts you in control.



KEY FEATURES

- ✔ High-performance digital round gauges
- ✔ 80/85mm and 52mm variants available
- ✔ Color segmented display with telltales
- ✔ Customizable with 9 stylish bezels
- ✔ 12/24 V nominal voltage
- ✔ Fully configurable 52mm variant (functions and alarms)
- ✔ Analog and digital (CAN) input (250 and 500 kbit/s)
- ✔ Alarm output on both variants
- ✔ Configuration via smartphone for easy setup
- ✔ Laser pushbutton for seamless data scrolling
- ✔ Custom alarm text



SUPPORTED CONFIGURATIONS

| ENGINE | BATTERY | WEATHER |
|------------------|----------------------|---------------------|
| RPM | Battery Voltage | Outside Air Temp |
| Gear Position | Ammeter | |
| Boost Pressure | Battery SOC | VEHICLE |
| Coolant Pressure | Energy consumption | Clock |
| Coolant Temp | Remaining range | Speed |
| Fuel Rate | Alternator Potential | Odometer |
| Engine Hours | | Trip Time A |
| Air Intake Temp | TANKS | Trip Distance A |
| Engine Load | Fuel Level | Trip Time B |
| Exhaust Temp | Fresh Water Level | Trip Distance B |
| Engine Oil Temp | DEF / Blue Level | Brake Pressure |
| Engine Oil Press | Fuel Temp | Hydraulic Oil Temp |
| Transm Oil Temp | Fuel Pressure | Hydraulic Oil Press |
| Transm Oil Press | | PTO 1 and PTO 2 |



VL Digital represents a quantum leap, combining state-of-the-art technology with powerful functions to meet modern needs.



Flexible

Two devices only to cover all the system configurations you might need.



Compatible

Plug-and-play replacement of your ViewLine instrument thanks to the backwards compatible connector pinout.



Programmable

Fully configurable with smartphone app to display the data you need.



Readable

The sunlight-readable display ensures perfect readability under every lighting condition.



Customizable

Give your VL Digital instrument a stylish touch with 9 different decorative bezels.





Instantly configure your instrument with your smartphone—no PC, no interfaces, just seamless wireless setup.

APP CONFIGURATION



- ✔ **Fast:** no prior pairing is required, just near the phone to instantly configure it.
- ✔ **Efficient:** thanks to the passive receiver you can configure the device powerless!
- ✔ **Secure:** the configuration requires proximity to the device.
- ✔ **Cost-effective:** no hardware interface is required.

Seamless Configuration at your Fingertips – Easily configure your VL Digital device in seconds using Veratron’s proprietary wireless link. All you need is your smartphone and the configurator App. The user-friendly configurator App will easily guide you through the configuration, which you can download to the instrument by simply nearing your phone to it.

85 mm Instrument

- ✔ **8-poles MQS connector plug-and-play** compatible with existing ViewLine gauges
- ✔ **Configurable as Tachometer / Speedometer / Power Meter** for electrical vehicles
- ✔ **Dual frequency input** for tachometer and hall-effect speed sensor
- ✔ **Analog resistive ports** for resistive sensors like Fuel or Water Temp
- ✔ **CAN port with SAE J1939** protocol with diagnostic data
- ✔ **Selectable displayed data**
- ✔ **Dedicated inputs** for alarm lamps, and specific input for Alternator D+
- ✔ **Configurable local alarms** with user-defined hysteresis and activation delay
- ✔ **Service Maintenance notifications**

52 mm Instrument

- ✔ **8-poles MQS connector plug-and-play** compatible with existing ViewLine gauges
- ✔ **Fully configurable with smartphone app** to display the data you need
- ✔ **Programmable Warning and Alarm levels** for the displayed data
- ✔ **Alarm output** for external buzzer or lamp activation
- ✔ **Data measured from analog port or received via CAN bus** with SAE J1939 protocol



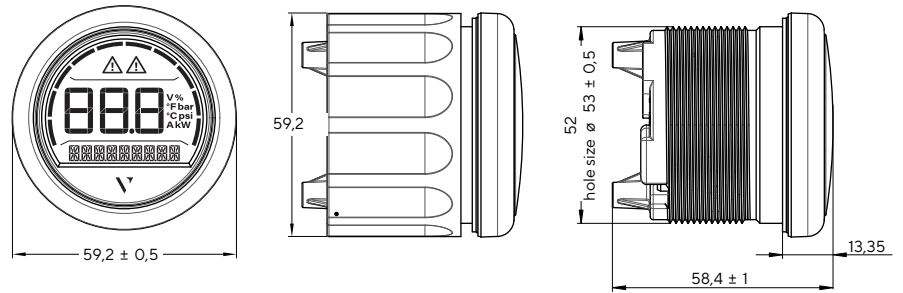
**9 different styling
rings available**

Technical Information and Specifications

TECHNICAL DATA

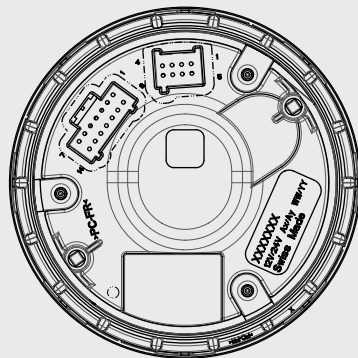
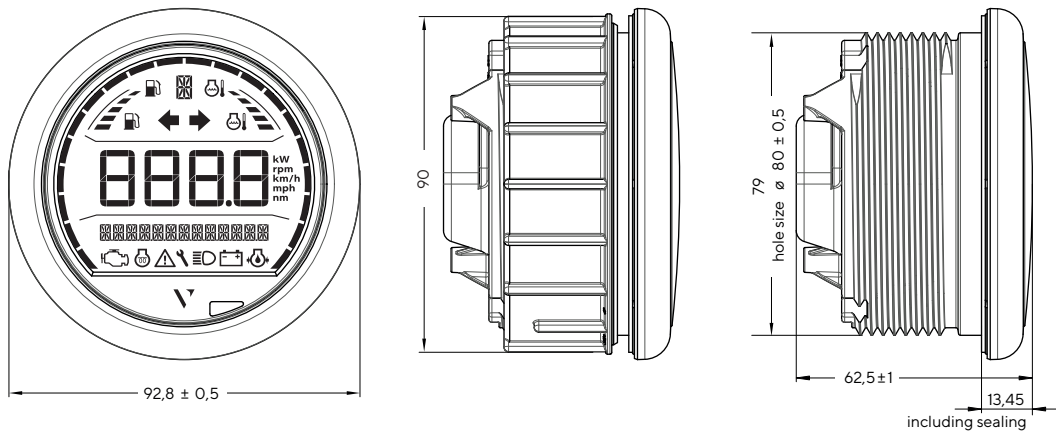
| | |
|-----------------------------|--|
| Display | IBN color display |
| Front Lens | PMMA single lens |
| Mounting | Spinlock Nut; panel thickness 0.5mm - 20mm |
| Protection Class | according to IEC 60529 Front: IP67 (in nominal position) Rear: IP52 (in nominal position) |
| Connector | 8/14 pin TE MQS connector system |
| Nominal voltage | 12 / 24V |
| Operating Temp. | -20°C to +70°C |
| Storage Temp. | -30°C to +80°C |
| Analog inputs (85mm) | 2x Frequency (one supporting Hall effect sensors) 2x Resistive 1x 0-5V (with 5V output for sensor feeding) |
| Analog input (52mm) | 1x Resistive |
| CAN port | SAE J1939 protocol with configurable baud rate |
| Wireless interface | AirWave ready for configuration via App |

VL DIGITAL 52 MM



| PIN | DESCRIPTION |
|-----|-------------------------|
| 01 | Battery Plus (Term. 15) |
| 02 | GND |
| 03 | Signal GND |
| 04 | Alarm output 500mA |
| 05 | Resistive Input |
| 06 | Illumination (Term. 58) |
| 07 | CAN Hi (J1939) |
| 08 | CAN Lo (J1939) |

VL DIGITAL 85 MM



| PIN | DESCRIPTION |
|-----|---------------------------------|
| 01 | N.C. |
| 02 | Resistive (Fuel) |
| 03 | Resistive (Water Temp) |
| 04 | 0-5 Volt in (OPT) |
| 05 | Input active H (High Beam) |
| 06 | Input active H (Turn R) |
| 07 | Input active H (Turn L) |
| 08 | Input active L (Alternator D+) |
| 09 | Input active L (Oil Pressure) |
| 10 | Input active L (Pre Heat) |
| 11 | Input active L (Water Temp) |
| 12 | 5V Out (sensor feed) / OPT |
| 13 | Alarm out 1 (+ prog hysteresis) |
| 14 | Alarm out 2 (+ prog hysteresis) |

| ACCESSORIES | ARTICLE NR. |
|--|------------------|
| 8-pin harness | A2C59512947 |
| 14-pin harness | B00214601 |
| Spinlock nut 52 mm | A2C5205947101 |
| Spinlock nut 85 mm | A2C5321223801 |
| Connector set 8 pin | A2C59510850 |
| Connector set 14 pin | A2C59510851 |
| Hand pliers | TE No. 539635-1 |
| Single contacts 0.14 – 0.22 mm ² tin plated | TE No. 1355718-1 |
| Single contacts 0.5 – 0.75 mm ² tin plated | TE No. 963729-1 |
| Strip 0.14 – 0.22 mm ² tin plated | TE No. 1355717-1 |
| Strip 0.25 – 0.5 mm ² tin plated | TE No. 928999-1 |
| Strip 0.5 – 0.75 mm ² tin plated | TE No. 963715-1 |

| BEZELS | Black | Chrome | White |
|--------------------|-------------|-------------|-------------|
| Bezel 52 mm | | | |
| Flat | A2C53186040 | A2C53186023 | A2C53186022 |
| Round | A2C53186027 | A2C53186029 | A2C53186028 |
| Triangle | A2C53186024 | A2C53186026 | A2C53186025 |
| Bezel 85 mm | | | |
| Flat | A2C53192911 | A2C53192910 | A2C53192912 |
| Round | A2C53192913 | A2C53192914 | A2C53192916 |
| Triangle | A2C53192917 | A2C53192918 | A2C53192920 |

| INSTRUMENT | ART.NR. |
|---------------------------------------|-----------|
| VL DIGITAL 52 Triangular Black Bezel | B00205701 |
| VL DIGITAL 52 Round Black Bezel | B00205702 |
| VL DIGITAL 52 Triangular Chrome Bezel | B00205703 |
| VL DIGITAL 52 Round Chrome Bezel | B00205704 |
| VL DIGITAL 85 Triangular Black Bezel | B00205801 |
| VL DIGITAL 85 Round Black Bezel | B00205802 |
| VL DIGITAL 85 Triangular Chrome Bezel | B00205803 |
| VL DIGITAL 85 Round Chrome Bezel | B00205804 |

| BULK | ART.NR. |
|--|-----------|
| VL DIGITAL 52 bulk of 10 Units without Wire and Bezel | B00205710 |
| VL DIGITAL 85 bulk of 10 Units without Wire and Bezel | B00205810 |

OUTDOOR INSTRUMENTATION ENGINEERED IN SWITZERLAND



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