

Multiviu® Compact 4

4,3" TFT Color Display Unit



Multiviu Compact 4 is a flexible full digital display instrumentation, with a bright TFT module that stays readable even under direct sunlight.

Multiviu Compact 4 can easily be adapted to give you your individual product. The customization options start with a branded cover glass, individual telltales and menu buttons and reaches up to a specific housing. It can be used for agriculture, construction, stationary engines and powersports.



Features

- Robust and versatile design.
- CAN-capability (SAE J1939).
- Video interface.
- Analog and digital input.
- Protection class IP 67 front & back.
- Ambient light sensor.
- Sunlight readable 1000 cd/m² typ.
- Optional bluetooth for smartphone connection.

Versions

	Entry	Basic	Basic BT
Internal memory	Flash 64 MByte SRAM: 192 kByte	Flash: 64 MByte SRAM: 192 kByte	Flash: 64 MByte SRAM: 192 kByte
Video input	1 x analog video (PAL or NTSC)	1 x analog video (PAL or NTSC)	1 x analog video (PAL or NTSC)
Digital inputs	4x	16x	16x
Analog inputs		3x Resistive, 3x Voltage, 2x Frequency	3x Resistive, 3x Voltage, 2x Frequency
Digital outputs	2	2	2
Menu buttons	4	4	4
Telltales	10 (+2)	10 (+2)	10 (+2)
Low Energy Bluetooth	-	-	Yes

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Display

Type: TFT LCD with LED backlight.

Size: 4.3", transmissive.

Resolution: 480 x 272 pixel, WQVGA, 16:9.

Colors: 16.7 M.

Brightness: typ. 1000 cd/m².

Contrast ratio: typ. 800:1.

Input Devices

Menu buttons:

- Button 1: Home.
- Button 2: Up.
- Button 3: Down.
- Button 4: Enter.

Electronics

Processor platform:

- CPU: 32 bit.
- RAM: 192 kByte.
- RTC: Internal calculation.

Power supply:

- Operating voltage range: 8 ... 32 V DC (Input accuracy is highest at nominal voltage).
- Protection: Short circuit protection.
- Overvoltage protection: 36 V for max. 60 minutes.
- Inverse polarity protection: Up to -28 V DC for max. 60 seconds.
- Current consumption:

Power mode	Current at 12 Vdc	Current at 24 Vdc
On	300 mA	170 mA
Off	5 mA	3 mA

CAN interfaces

- 2 x CAN interfaces
 - ISO 11898, CAN-specification 2.0 B active.
 - Default 250 Kbit/s or 500 Kbit/s.

Inputs:

4 x digital input (Entry), 16x digital input & 8 analog inputs (Basic, Basic BT):

- Digital: High or Low active, not direct driven.
- Analog resistive: 0 – 500 Ohm, 10 bit resolution.
- Analog voltage: 0 – 5 Volt, 10 bit resolution.

Outputs:

2 x digital output:

- Short circuit protection: Up to 32 V DC.

Connections

Main connector (all variants): 26 pins Tyco AMP 3-1437290-7.

2nd Connector (Basic, Basic BT): 26 pins Tyco AMP 3-1437290-8.

Video connector: Video FAKRA connector, "E" coded.

Software

Operating system: OSEK OS.

Application programming:

- Logic: KIBES-32 logi.CAD.
- Graphical: grADI.

Bluetooth:

Use cases according to GATT Protocol.

- Sensor data:
 - Maximum application throughput up to 250 Kbit/s.
 - Example: Send ODO to smartphone.
 - Forward information to a Cloud.
- Indication:
 - Incoming call number (incl. caller ID).
 - Incoming SMS.
 - Social network messages.
- Turn by turn navigation:
 - Indication of turn-by-turn navigation instructions coming from Google Maps navigation app.
- Media:
 - Media player control functions.
 - Media info.
- Accept or decline calls, no audio routing.

Testing & verification

CE compliance:

- ISO 7637-3:2007: Part 3.
- ISO 11452-4:2005: Part 4.

e-Certificate: EU Directive 72/245/EWG (Jan-2013).

Protection level: IP 67 (front and rear) according to ISO 15003-2006.

Electrical requirements: 12 and 24 V according to ISO 16750-2-2010.

Mechanical requirements:

- Mechanical shock: Level 2 according to ISO 15003-2006.
- Random vibration: Class A according to JASO D001-94.

Climate requirements:

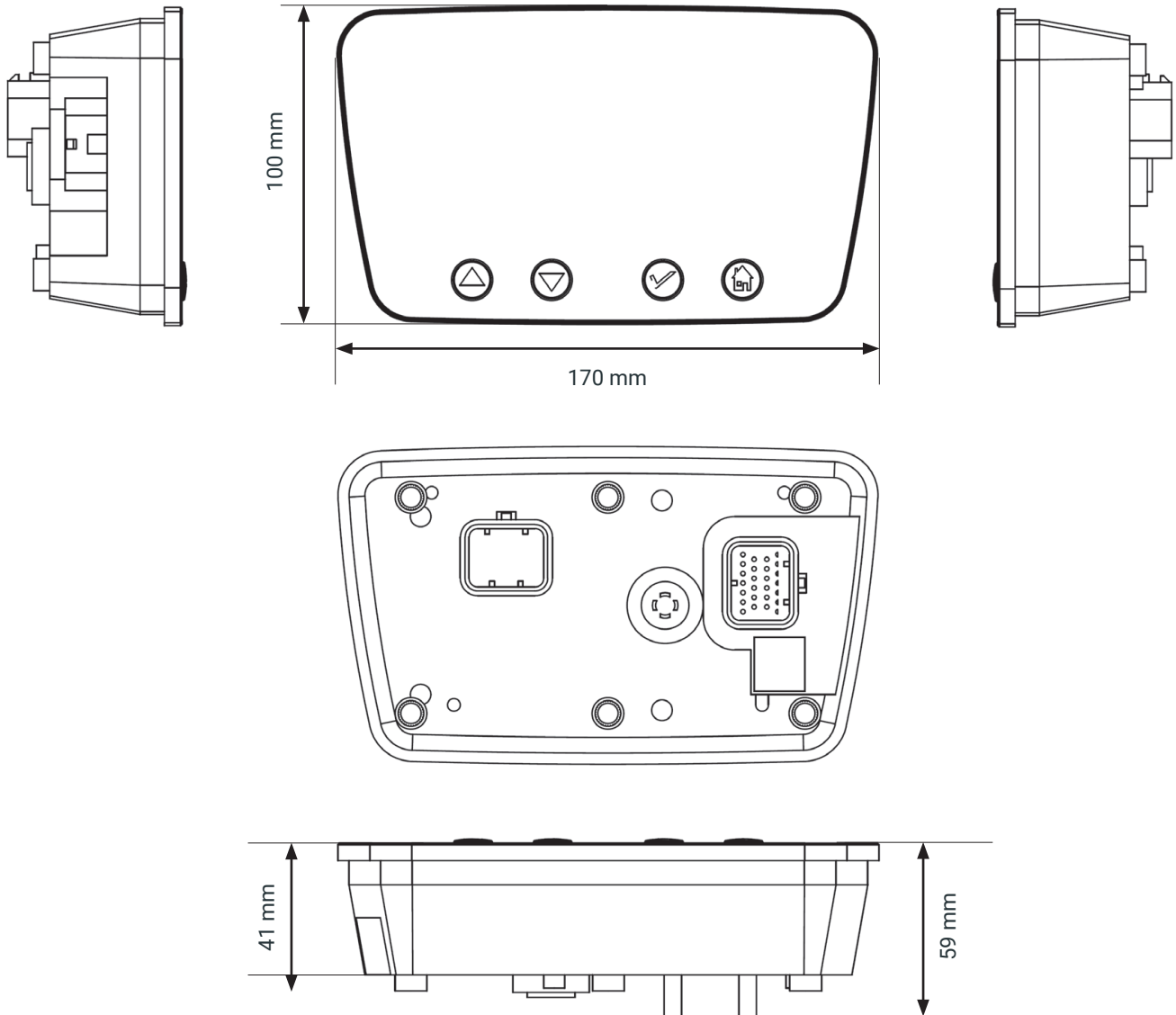
- Operating temperature: -30 - +75°C.
- Storage temperature: -40 - +85°C.

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Product details



Ordering information

Model	Part-no.
MultiViu@Compact 4 Entry	10025C4E
MultiViu@Compact 4 Basic	10025C4B
MultiViu@Compact 4 Basic BT	10025C4BT

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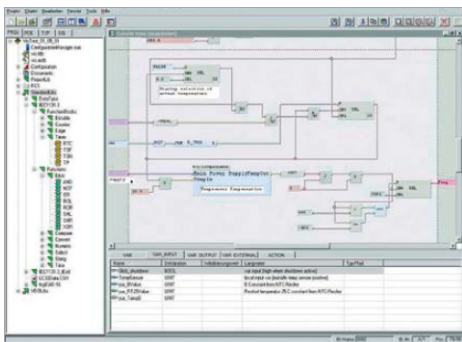


Software for GUI development

Create your tailored user interface using the KIBES®-32 and grADI development tools that allow the instrument clusters to be programmed and configured to perfectly fit any your requirements. Application programming can be done by the customer or by Hydratronics.

KIBES®-32

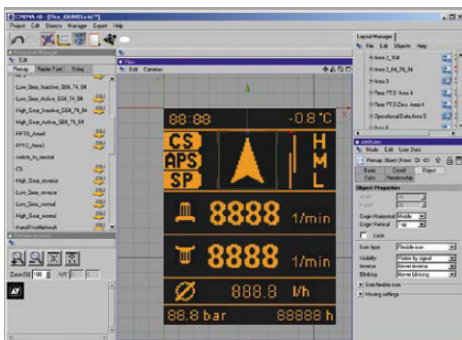
The KIBES®-32 software is used for creating the application program on a graphical level according to standard IEC 61131. It offers additional features like automatically generated documentation, an online and offline simulation, a comfortable configuration manager, download etc. A patch generator provides flexibility in module linking according to the vehicle functions. A quasi-multi-tasking operation supports the separation of time-critical and standard modules to run.



- Reduced development time and risk.
- Off-line simulation and online test.
- Integrated version and revision management.
- Easy to learn GUI for HMI implementation.
- Configuration manager.

grADI

The grADI software is a tool for professional mask design. It gives you the possibility to create your own graphical HMI and to react with high flexibility to market demands.



- Supports screen design of dot-matrix and colored TFT displays up to WVGA resolution.
- Fits seamlessly to the KIBES®-32 software tool chain.
- Graphic objects and text files are created by a common software tool like Adobe and can be easily imported into grADI.
- Multi-language support for international applications.
- Development tool based on CINEMA 4D.