



# GDX GRAPHIC DISPLAYS

## NEXT GENERATION DISPLAY TECHNOLOGY

Modular hardware, a wide range of interfaces, and predefined toolchains enable fast development of customized display solutions. Fast, efficient, and tailored to your needs.

# INNOVATIVE DISPLAY SOLUTIONS FOR DEMANDING APPLICATIONS



The GDx series comprises three base models that stand out with numerous features:

- **Built to endure extreme conditions**  
IP65 protection class and an operating temperature range from -30°C to +70°C
- **High-performance processor & large memory**  
Yocto 4-based Linux OS, i.MX8 quad-core, 2 GB RAM, and up to 64 GB eMMC flash memory for optimal performance.
- **Optimal readability**  
Anti-glare cover lens, 85° viewing angle, high brightness (1000 cd/m²), and optical bonding ensure excellent readability – even in direct sunlight.
- **Certified quality**  
Certified sunlight resistance (DIN 75220)
- **Precise control**  
PCAP touch – operable even with moisture and gloves.
- **Clear sound**  
1.5 W speaker for clear audio output.
- **Flexible screen orientation**  
16:10 format – usable in landscape or portrait mode.

## THREE VARIANTS, COUNTLESS POSSIBILITIES



### GDT-100

Graphic Display Touch  
10 inch, 1280 x 800 pixels



### GDT-070

Graphic Display Touch  
7 inch, 800 x 480 pixels



### GDH-070

Graphic Display Hybrid  
7 inch, 800 x 480 pixels,  
customised front foil

# TAILOR-MADE SOLUTIONS FOR EVERY REQUIREMENT

With the versatile, modular displays in the GDx series, you can customize the optimum solution for your machines - even in small quantities!



## 1. Select your display variant

Choose the right model for your application from three base variants.



## 2. Specify interfaces, connector modules, and control elements

Configure the required interfaces, equip your display with the desired connector modules, and select suitable control elements based on your requirements.



## 3. Create your own application

Easily develop your own application using the GDx Suite software platform with Qt 6.5 or CODESYS 3.5 – the user-friendly suite supports you with development tools and sample implementations.

## KEY BENEFITS AT A GLANCE

- **Versatile:** Whether mounted inside or outside – the displays in the GDx series can be used flexibly.
- **Customizable:** From interfaces and connectors to controls and software – all components are fully configurable.
- **Scalable:** A well-thought-out hardware and software platform allows easy development of a customized application that can run on all display variants.
- **Future-proof:** Thanks to the modular design and diverse interfaces, displays can be easily adapted or expanded to meet new requirements at any time.
- **Sustainable:** Screwed housings facilitate maintenance and repair in compliance with EU regulations (Directive (EU) 2024/1799).

# TAILORED TO YOUR NEEDS

## MAXIMUM INTERFACE VARIETY

The GDx series offers a wide range of interfaces to ensure seamless integration and efficient data communication.

You decide which interfaces are used:

- » **CAN:** Three interfaces for reliable communication (CAN-FD capable)
- » **UART:** Two RS232 interfaces
- » **Ethernet:** Two high-speed ports (usable in parallel), ideal for integrating digital cameras
  - **Standard Ethernet:** One port for fast data communication (1 Gbit or 100 Mbit)
  - **SPE:** Special 2-wire Ethernet port (optimized for machine networking in harsh environments)
- » **USB:** One USB 2.0 high-speed port, e.g. for updating applications or downloading process data to a USB stick.
- » **Digital inputs:** Two digital inputs (0V/24V)
- » **Analog camera inputs:** Four inputs for standard PAL/NTSC analog cameras – all four can be displayed simultaneously

## FLEXIBLE CABLING FOR PERFECT INTEGRATION

The GDx series also remains flexible when it comes to cabling. You determine the connector: **the type, position and cable outlet** (e.g. downwards or to the rear) can be customized - for a display solution that integrates seamlessly into your machine.



## CUSTOMIZE YOUR CONTROL ELEMENTS

In addition to connector modules, control elements such as keypads, rotary and push-button and emergency stop switches can be configured and positioned individually. This ensures intuitive operation and increased safety through quick response options.

- Emergency stop switch
- Rotary- and push encoders
- Keypad
- LED indicators
- Custom mounting brackets



**Can't find a suitable add-on module with your desired connector or have an idea for your own module? Get in touch – we're flexible when it comes to custom solutions**

## EXTRA FLEXIBILITY WITH THE GDH

The GDH model offers special customization options - the front foil can be designed entirely according to your specifications. From color and button layout to status LEDs – everything is configurable.

Thanks to its modular design, the hybrid model can also be used as an integratable display module – ideal for smooth integration into dashboards or control panels.

**Tell us what you need - and design your customized solution with us!**



*Customised front foil according to your wishes.*

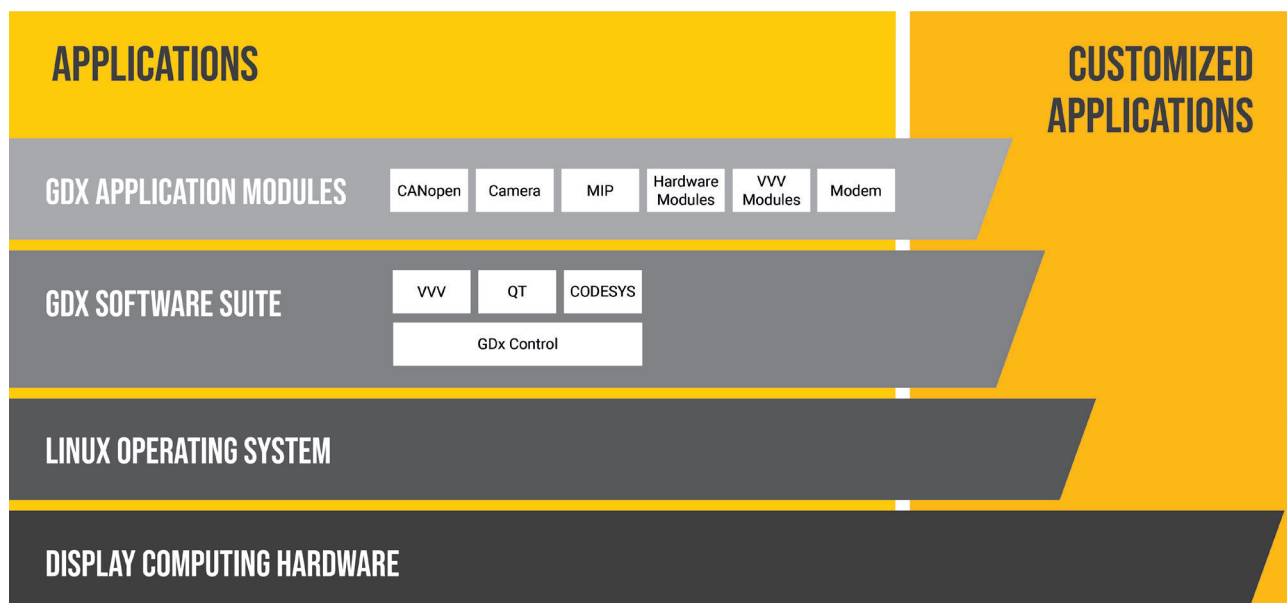
# GDX SUITE



## THE SOFTWARE PLATFORM FOR EFFICIENT APPLICATION DEVELOPMENT

The GDX Suite is the central software platform for all MOBA displays and enables fast, efficient development of customized applications using predefined toolchains. It provides a complete system solution – from firmware to application modules.

Based on a Linux operating system, GDX Suite allows for independent development, free from proprietary systems or programming languages.



## EFFICIENT DEVELOPMENT WITH PRECONFIGURED TOOLCHAINS

Preconfigured toolchains with powerful tools for graphics, control and fieldbus integration enable efficient application development.

Two main development approaches are supported.

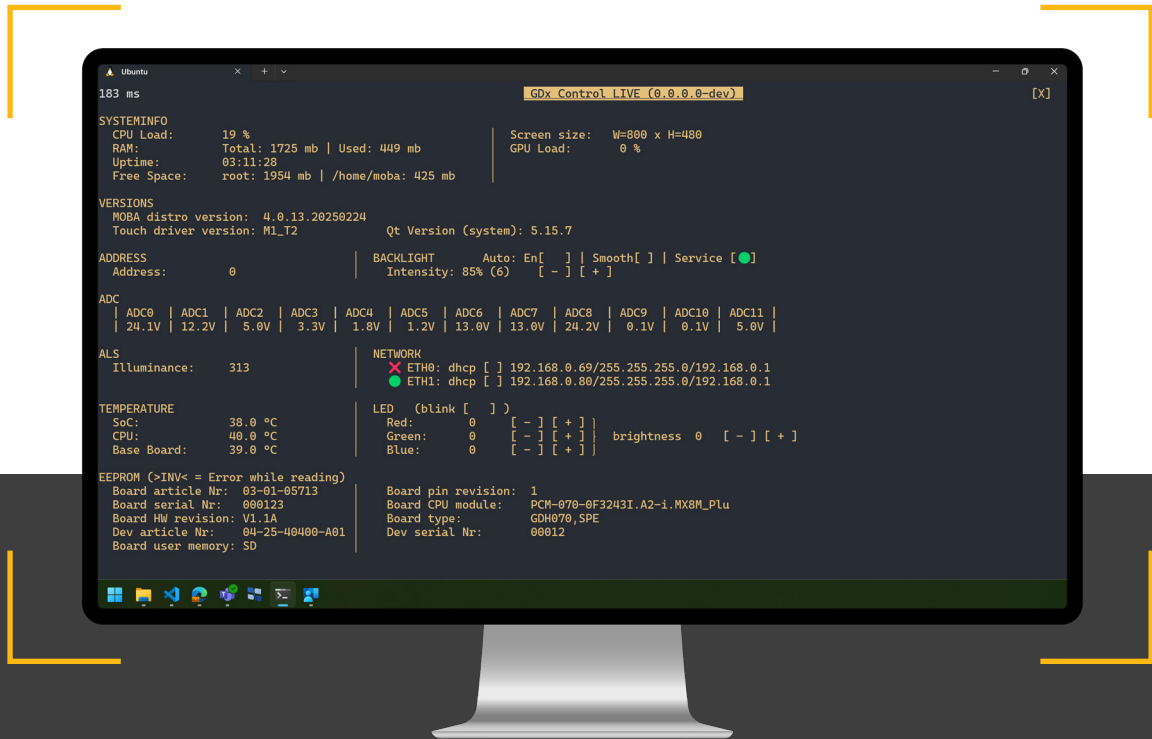
You can choose between:

- Qt-based system development
- CODESYS-supported PLC programming according to IEC 61131-3



# GDx CONTROL: EVERYTHING AT A GLANCE

To support application development, predefined software interfaces are available in the form of GDxControl libraries and GDx-Control-Live / GDx-Control-Console. These allow you to configure special device functions and abstract complex operations through a unified interface – across all GDx variants.



## FLEXIBLE EXPANSION, CUSTOMIZED APPLICATIONS

Independent application modules allow for flexible feature expansions at any time. We support you with our experience and expertise



### Camera integration

Visualization and control of multiple camera streams



### Object recognition

AI-powered computer vision solutions



### Web browser

Chromium-based HTML5 browser for connected applications



### QR code generator

Generate QR codes for diverse use cases



### Modem integration

Enables cloud access, Wi-Fi, and wireless communication



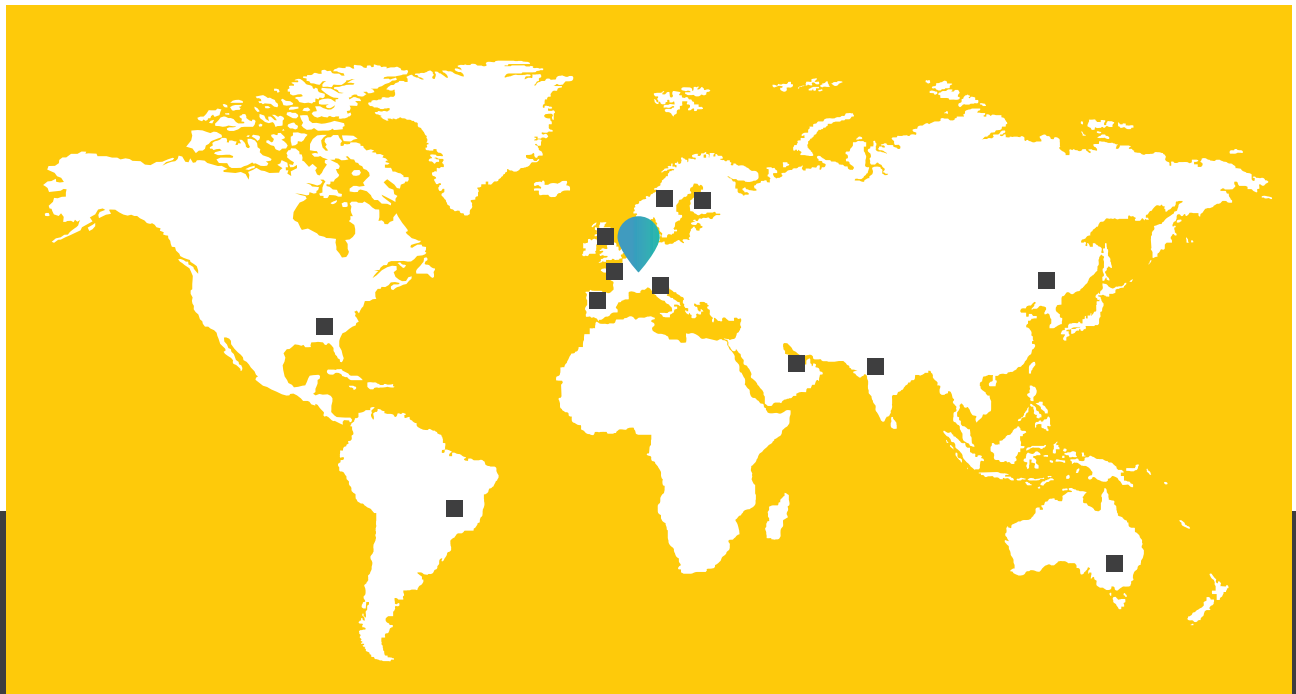
### MOBA Internet Platform (MIP)

Interface to MIP for remote maintenance and fleet management

# MOBA GROUP

The MOBA Group has been an established name in mobile automation for more than 50 years. Our know-how and many years of experience in automation technology distinguish us as globally recognized experts. We develop and produce innovative machine control systems, identification and mobile weighing technologies as well as flexible software solutions. But MOBA components and systems are also used in other areas where robust and reliable sensors, controllers and operating units are required.

**First Choice In Mobile Automation** - that's what MOBA has stood for for more than 50 years!



## CONTACT



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