

ecomatDisplay: stay in touch

Powerful, robust HMIs for mobile machines

- LC displays with LED backlight, available as touch device or with two key rows
- Compact housing with multiple interfaces and optimised for mobile use
- Freely programmable using CODESYS 3.5 (IEC 61131-3) or Qt – maximum flexibility in UI design



IP65 IP67 CODESYS

ifm – close to you!

Display size	Resolution	Memory location	Video inputs	Brightness [cd/m²]	Keys	CAN	USB	Ethernet	Order no.
7"	800 x 480	64 GB flash	4	800	yes	4	2	2	**CR1078**
7"	800 x 480	32 GB flash	2	800	no	4	1	1	**CR1079**

Display and operation in harsh environments

The mobile HMIs have been developed for use in cabins and outside vehicles. Thanks to their high protection rating and optical bonding, they are optimally protected against moisture and can withstand strong impacts, continuous vibration and extreme ambient temperatures.

The high-resolution RGB LED displays ensure excellent readability, even in bright ambient light. The displays feature a capacitive touchscreen for operation tasks. The CR1078 device also has two additional key rows.

The integrated, powerful PLC performs visualisation and operation tasks and is freely programmable via CODESYS. Numerous interfaces at the back of the device, e.g. CAN, analogue video, USB 2.0 and Ethernet offer maximum connectivity.

Mechanical design

The displays have a sealed diecast aluminium housing with protection ratings IP65, IP67. For connection sealed M12 connections and a 40-pole AMP connector are used. The displays can be used as surface mount device using the tried-and-tested RAM mount system or can be mounted in a wall.

Powerful electronics

The integrated 64-bit controller enables both powerful rendering of the high-resolution graphics and the execution of the application program and device functions. In addition, there is a wide range of communication and integration possibilities with other systems and networks. With the integrated real-time clock it is possible to give log data a time stamp for better traceability.

Moreover, all displays feature a wide range of audio functions, such as for acoustic and voice messages.

Technical data		
Operating voltage	[V]	8...32
Ambient temperature	[°C]	-35...65
Audio output		Stereo Class D, 1 W, 8 Ω, BTL
Number of inputs and outputs		2 digital inputs 2 digital outputs
RAM memory		1 GByte RAM
programming		CODESYS 3.5 or Qt
Ethernet camera support		RTP / RTSP MJPEG / H264
Protection rating		IP65, IP67

Programming according to IEC 61131-3 or Qt

The CODESYS software enables a clear and easy creation of the application software. Alternatively, the same hardware be programmed using Qt/C++. On request, a suitable virtual Linux machine with a pre-installed Software Development Kit (SDK) can be provided.

Find out more about our high-performance, versatile ecomatDisplays and discover many more display versions and sizes:
www.ifm.com/cnt/ecomatDisplay

BEST FRIENDS



CR3171 mobile IoT gateway:
Global access to the machine via mobile network



CR721S safety controller
Programmable controller for mobile machines



CR2052 I/O module
For signal processing in mobile machines

For further technical details, please visit: ifm.com/fs/CR1078

We reserve the right to make technical alterations without prior notice. · 11.2026
ifm electronic gmbh · Friedrichstr. 1 · 45128 Essen