

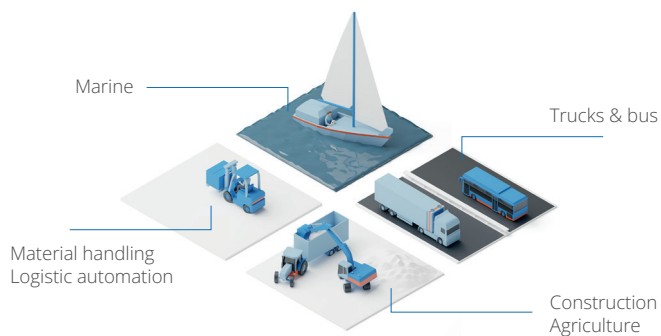
PTview AM7-RF

7" IP69K HMI with physical buttons

AM7-RF is the most rugged HMI in the PTview series, engineered for demanding automotive environments with an operating range from -40 to +85 °C. Its IP69K rating ensures resistance to high-pressure, high-temperature wash-downs, making it ideal for applications where durability, usability, and reliability are essential.



Application



Automotive environments

Designed specifically for automotive use, AM7-RF meets both electrical and environmental requirements. Its electronics comply with ISO 16750-2 and ISO 7637-2/3, guaranteeing reliable operation on 12 V and 24 V electrical systems. Robust physical buttons further support intuitive operation - even when operators wear thick gloves in cold or challenging environments.

Automotive interfaces

Next to CAN, AM7-RF integrates an Automotive Ethernet interface, representing the next generation of in-vehicle communication for commercial and professional mobility applications. Based on single-pair Ethernet technology, it is optimized to meet stringent automotive EMC requirements while delivering reliable, high-bandwidth data communication. By enabling zonal vehicle architectures, Automotive Ethernet simplifies electrical system design, reduces wiring complexity, and supports cost-optimized, scalable vehicle platforms.

Product features



Scalable and customizable

This product is a scalable and customizable solution built on proven technology building blocks, offering unmatched flexibility for a wide variety of applications. With the ability to upgrade the main processor and memory as well as the ability to tailor digital and analog I/O to your exact needs, this controller is designed to grow with your application while ensuring reliable performance and seamless integration.

Processing & Memory

Microprocessor	NXP i.MX RT 1172
Cores	ARM Cortex-M7 480MHz
Memory	2MB
Flash	8MB

HMI

Display	7" TFT LCD panel
Resolution	1024x768
Buttons	8x physical buttons

Interfaces

Power input	12/24V DC
Ethernet	10/100/1000 BASE-T1(S/L)
CAN	CAN 2.0 up to 1Mbit/s

Software

Operating System	FreeRTOS
------------------	----------

Environmental Compliance

Ambient temperature	-40 to +85°C
Ingress Protection	IP69K
Thermal Shock	IEC 60068-2-14 (Na), 300 cycles
Thermal Cycling	IEC 60068-2-14 (Nb), 300 cycles
Vibrations	IEC 60068-2-64, 2.1Grms
Mechanical Shock	IEC 60068-2-27, 50G
Humidity	IEC 60068-2-38 (Z/AD), RH=95%
Salt Spray	IEC 60068-2-52 (severity 5)

EMC	CISPR 25
-----	----------

Safety	IEC 62368-1:2018
--------	------------------

Information subject to change, contact us for more details

PRODRIVE
TECHNOLOGIES