

Vision 307

Description

Vision 307 is a robust 7.0" touchscreen display with built-in, high-end Vision 3 display controller and solid protection for use in off-highway vehicles. Beside various communication interfaces the display is ready for direct connection of cameras and enables audio output via integrated loudspeaker. The Vision 307 is optically bonded for perfect sunlight readability, the housing is sealed, and the device withstands extreme temperature, shocks and vibrations.

Specifications

Display diagonal size	7.0" 15:9 aspect ratio
Dimensions	194 mm x 136 mm x 40 mm (46 mm incl. connector)
Weight	0,9 kg
Resolution	800 (W) x 480 (H) pixel
LCD type	TFT (thin film transistor) active matrix
Backlight	LED

Optical Characteristics

Luminance	800 cd /m ² typ.
Viewing angle	V = ± 80° H = ± 80°
Contrast ratio	1000:1

Maximum Ratings

Operating temperature	-30 to +70 °C (ambient)
Storage temperature	-30 to +80 °C
Supply voltage	8 to 32 V

Standards

CE-Mark	2014/30/EU
E- Mark	ECE 10R-05
EMC	ISO 13766 EN 13309 ISO 7637-3
ESD	ISO 13766 ISO 10605
Electrical	ISO 16750-2
Ingress Protection	EN 60529 IP67 ISO 20653 IP6k7
Climatic	ISO 16750-4
Mechanical	ISO 16750-3



System Components

- NXP i.MX6 application processor, 32bit ARM, 800 MHz, single core
- 8 GB eMMC Flash, 512 MB RAM
- Non-volatile Memory 32 kByte EEPROM
- RTC buffered by supercapacitor
- Display backlight auto-dimmable via ambient light sensor
- Internal temperature sensors for ambient and CPU temperature
- Panel or cabin mount, landscape or portrait orientation
- Projective capacitive touchscreen
- Optically bonded

Interfaces

- 2 x video input for external composite video cameras
- 2 x CAN, 25 kbit/s up to 1 Mbit/s
- 1 x 100Base-TX
- 1 x USB 2.0 OTG
- Terminal 15 for ignition input
- RGB status LED
- 1 x RS-232
- 1 x integrated loudspeaker

Software

- Available with the software platform MATCH® by HYDAC Software.
- Programmable with CODESYS® V3 with Standard Visu, including support for CANopen® master or with Qt - C/C++
- Display of videos, .pdf-files and animations
- Picture-in-picture functionality
- Sleep mode - wake-up to full operation within less than half a second. Configurable wake-up sources: touchscreen, wake-up input, RTC and CAN interfaces

Reverse polarity protection and protection of all external interfaces (except USB) against short circuit to GND and BAT+.

Block Diagram

