



Vision3 is a robust **12.1" touchscreen display** with built-in, high-end **Vision3** 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. **Vision3** is optically bonded for perfect **sunlight readability**, the housing is sealed, and the device withstands extreme temperature, shocks and vibrations

SPECIFICATIONS

DIAGONAL SIZE	12.1" 16:10 aspect ratio
DIMENSIONS	305 mm x 223 mm x 35 mm (46 mm incl. Connector)
WEIGHT	2.2 kg
RESOLUTION	1280 (W) x 800 (H) pixel
LCD TYPE	TFT (thin film transistor) active matrix
BACKLIGHT	LED

MAXIMUM RATINGS

OPERATING TEMPERATURE	-30 to +70 °C (ambient)
STORAGE TEMPERATURE	-30 to +85 °C
SUPPLY VOLTAGE	9 to 32V

OPTICAL CHARACTERISTICS

LUMINANCE	500 cd /m ² typ.
VIEWING ANGLE	V = ± 89° H = ± 89°
CONTRAST RATIO	1000:1

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 IP65 ISO 20653 IP6k5
CLIMATIC	ISO 16750-4
MECHANICAL	ISO 16750-3

CHARACTERISTICS

+ SYSTEM COMPONENTS:

NXP i.MX6 application processor, 32bit ARM, 800 MHz, single core
 4 GB eMMC Flash, 512 MB RAM
 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 videocameras
 2 x CAN, 25 kbit/s up to 1 Mbit/s
 1 x 100Base-T1 (BroadR-Reach Ethernet)
 1 x USB 2.0 OTG
 Terminal 15 for ignition input
 RGB status LED
 1 x RS-232
 1 x integrated loudspeaker

+ SOFTWARE:

Programmable with CODESYS® V3 with enhanced target visualization, including support for CANopen® master or 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, BroadR-Reach and CAN interfaces

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

BLOCK DIAGRAM

