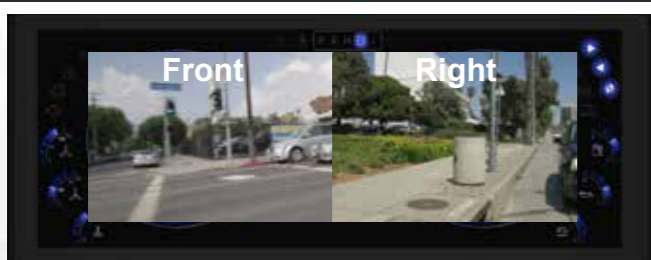


Monitor modes



2 cameras - split screen



1 camera - person detection

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MDDE3124

DIGITAL 12.3" HEAVY-DUTY
 SMART INSTRUMENT CLUSTER

MDDE3124

DIGITAL 12.3" HEAVY-DUTY SMART INSTRUMENT CLUSTER

The VIS MDDE3124 12.3" Smart Instrument Cluster with Advanced Driver Assistance Systems (ADAS) is designed to revolutionize your vehicle's interface. This innovative instrument cluster seamlessly consolidates machine monitoring, camera functions, and ADAS into a single, cohesive unit, offering a streamlined and efficient solution for modern mobile machinery.

Our integrated solution significantly reduces complexity, making connectivity and installation a breeze. By simplifying these processes, we've not only made your vehicle smarter but also more user-friendly. This consolidation also translates to a reduction in Human-Machine Interface (HMI) and vision system costs, ensuring you get advanced functionality without the hefty price tag.



Scope of delivery

Monitor MDDE3124	xxx xxxx xxx
Leaflet: PBB-MDDE3124	xxx xxxx xxx
OPTIONAL:	
Connection cable MDDE3000-AK-x	xxx xxxx xxx
• MDDE3000-AK-1: power only	xxx xxxx xxx
• MDDE3000-AK-2: power + CAN	xxx xxxx xxx

Standards/Certificates/Quality Seals

- Conformities**
CE, FCC
- ECE regulations**
UN/ECE Regulation No. 10
- EMC Standards**
EN 12895 Industrial trucks
EN 14982 Agricultural/forestry machinery
EN 50121-3/4 Railway
ISO 13766 Earth-moving machinery, construction machinery
- Other standards**
EN 45545 Fire protection rail vehicles

Key Facts

- Fully Configurable**
 - 12.3" display -- high resolution 1920 x 720
 - Fully customizable HMI (Crank UI or other)
- Scalable safety**
 - Add up to 4 cameras (Ethernet, BR-R, Analog)
 - Person detection software
 - Hypervisor support
- Flexible I/O**
 - Integrates with existing vehicle systems
 - 2 CAN data bus
 - External audio alarm
- Reduce system costs**
 - Smart cluster / display simplifies architecture
 - Reduces space envelope and weight
 - Reduces cabling and installation time (fewer terminations)

PIN connections

1	PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	2	PIN	1	2	3	4													
	Function	Switched Input 4	Switched Input 3	Switched Input 2	Switched Input 1	Camera Power 4	Camera Power 2	GND	Camera Power 3	Camera Power 1	Switched Input 5	Switched Input 6	Switched Input 7	Switched Input 8	Switched Input 9	GND	GND	Low Side Driver OUTPUT		Function	USB 5V@500mA	USB2.0_D_N	USB2.0_D_P	USB Return													
	PIN	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34		Function	RS232_RX	GND	CAN2 Shield	GND	CAN1 Shield	NC	GND	IGNITION	RS232_TX	NC	CAN2 (-)	CAN2 (+)	CAN1 (+)	CAN1 (-)	GND	BAT GND	BATTERY

Technical Data

SYSTEM	
Processor /Core	i.MX8M Plus Quad (w/ NPU)
Ram / Flash	4 GB DDR4 / 4 GB EMMC
Vibration	4G (heavy Truck profile)
Power supply	9 to 32 V DC
Sealing	IP67
Temperature Rating	-30 to +85 °C
DISPLAY	
Display size	12.3" 1920 x 720 (touch optional)
Display performance	IPS, 1000 Nits
External Display Connection	1 x GMSL Connection
CAMERA	
Ethernet 100Base-TX	4 x M12-D with pPoE
Ethernet Broad-R 100Base-T1	4 x M12-D with PoDL
Analog	2 x NTSC/PAL/TVI
Camera power supply	4 x (pPoE or PoDL) pass-thru from main connector
I/O INTERFACE	
Protected Output driver	1 x Low Side
Gigabit Ethernet 1000Base-T	M12 X coded
USB 2.0 (SW updates)	USB 2.0 0.5A limit, 4 pin harness connector
Switched Inputs	9 configurable STB/STG, 2 can be resistive analog
User interface	Touch Screen, STG harness, CAN
UART port on main harness connector	1 RS232
CAN Ports (250/500K)	2 x CAN
Buzzer	85 dB 1800 Hz
MISC	
Real Time Clock	20-day backup
Micro SD card	Optional storage
Accelerometer	3-axis
Light Sensor	Supported as analog input

Additional Camera Options

Plug connection



- 1** = 34 Pin TE
- 2** = 4 Pin TE (USB 2.0)
- 3** = Gigabit

Dimensions

