

— About NVR

Founded in 2009 in Silicon Valley, NVR is a leading provider of intelligent electronic control systems and IoT solutions. Committed to our mission "NVR is your electrification partner" we strive to deliver cutting-edge solutions that meet the evolving needs of our customers.



AE1102 Electronic Control Unit

The AE1102 is an Electronic Control Unit (ECU) designed for use in scissor lifts, rough terrain scissor lifts, crawler scissor lifts, and mast lifts. It integrates an LCD display, chassis control buttons, and multiple I/O ports. The product has undergone multiple global certifications, ensuring it can meet the control requirements for scissor lifts around the world.



— Features

- LCD Display: Suitable for information presentation and vehicle configuration
- Compliance with Functional Safety, CE, FCC, and UL certification requirements
- Support for NVReTOOL (Android + iOS) for parameter modification and remote upgrades, enhancing service efficiency
- Dual MCU architecture for enhanced safety and reliability
- USB interface support

— Specifications

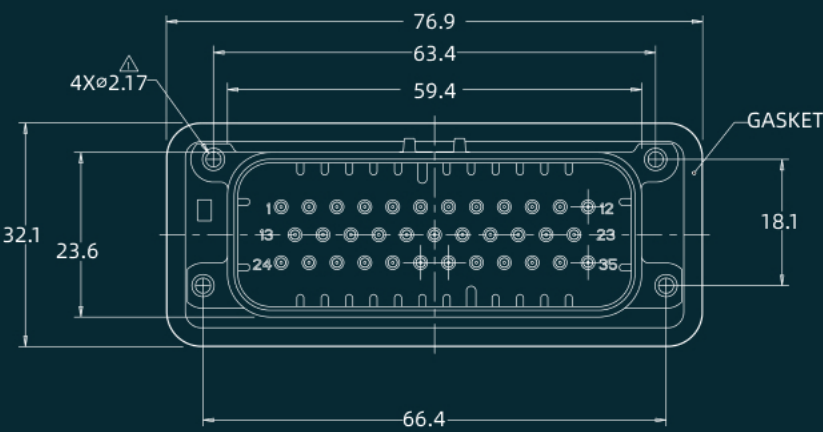
Item	Descriptions
Rated Voltage	24 V
Operating Voltage	9 - 32 V / 8 - 32 V (K2) *
Standby Current	0.2A@24V
Display Type	LCD
Pin Count	35 pin + 14 pin
Max Input Port	21 Channels
Max Output Port	20 Channels
CAN Communication	1 Channel
RS232-CAN Communication	1 Channel
NVReTOOL*	
Housing Material	PC/PET+GF30
Dimensions	184×122×60 mm
Weight	0.55 kg ± 0.01 kg
Button	7
Connector	TE 776231-1&776262-1
Protection Rating	IP66
Operating Ambient Temperature	-20 °C - +70 °C
Storage Ambient Temperature	-40 °C - +85 °C
Environmental Testing	IEC 60068-2-11:2021, ISO 16750-3:2012, QC/T 413:2002, ISO 16750-4:2010
Electrical Performance Testing	ISO 16750-2:2012
EMC Testing	ISO 7637-2:2011, ISO 7637-3:2016, ISO 10605:2023, ISO 11452-4:2020, ISO 11452-2:2019
Product Certifications	Functional Safety, CE, FCC, UL

* k2 is NVR internal designation for its functional safety-certified ECU platform.

*Note: NVReTOOL is an self-developed app-based diagnostic tool by that combines a wireless diagnostic box, mobile app, and device management platform. It enables easy program updates, parameter optimization, and data analysis.

— Connector & PIN Definition

Connector Model 1: TE 776231-1



Pin	Function	Descriptions
J1-1	DI_H_1	0V/24V
J1-2	DI_H_2	0V/24V
J1-3	DO_H_1	24VDC/2.5A
J1-4	PWR_1	24VDC/7.5A
J1-5	PWR_2	24VDC/7.5A
J1-6	DO_H_2	24VDC/2.5A
J1-7	DO_H_3	24VDC/2.5A
J1-8	DO_H_4	24VDC/2.5A
J1-9	AO_1(AI_V_9)	0-5VDC/10mA(0-5VDC Input)
J1-10	DI_H_3	0V/24V
J1-11	AI_V/C_1	0-5VDC/4-20mA Input
J1-12	DI_H_4	0V/24V
J1-13	CAN1_H	NA
J1-14	DI_H_5	0V/24V
J1-15	GND	0V
J1-16	AI_V/C_2	0-5VDC/4-20mA Input
J1-17	DI_L_1	0.5V
J1-18	DO_H_5	24VDC/2.5A

Pin	Function	Descriptions
J2-1	DO_H_12	24VDC/2.5A
J2-2	AI_V/C_4	0-5VDC/4-20mA Input
J2-3	AO_3	0-5VDC
J2-4	CAN2_H	-
J2-5	CAN2_L	-
J2-6	AI_V/C_5	0-5VDC/4-20mA Input
J2-7	AI_V/C_6	0-5VDC/4-20mA Input
J2-8	PWMI_1	24VDC/2.5A
J2-9	PWMI_2	24VDC/2.5A
J2-10	AO_4	0-5VDC
J2-11	DI_H_11	24VDC
J2-12	DI_H_12	24VDC
J2-13	DI_H_13	24VDC
J2-14	PWMI_3	24VDC/2.5A

— Dimensions

