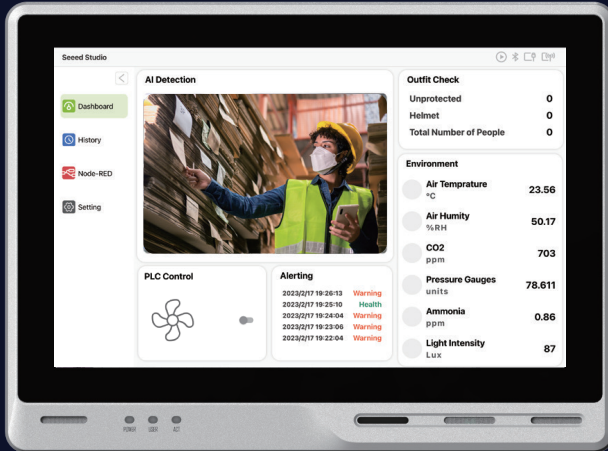




reTerminal DM

10.1" Integrated Device Master



reTerminal DM

[SKU 114070201](#)

reTerminal DM with
2Camera & PoE Version

[SKU 114070221](#)



HMI, PLC, Panel PC and Gateway in one
Perfect for distributed hub device



Low code programming for event-driven applications
Natively integrated Node-RED for flow-based editing and one-click deploy, compatible with all software runs on Raspberry Pi



Rugged design for harsh working environment
IP65 front panel, -10~50°C operating temperature



Hybrid connectivity
Support 5G, 4G LTE, LoRaWAN®, Wi-Fi, BLE, RS485/232, CANBus, 1000M Ethernet, USB, HDMI

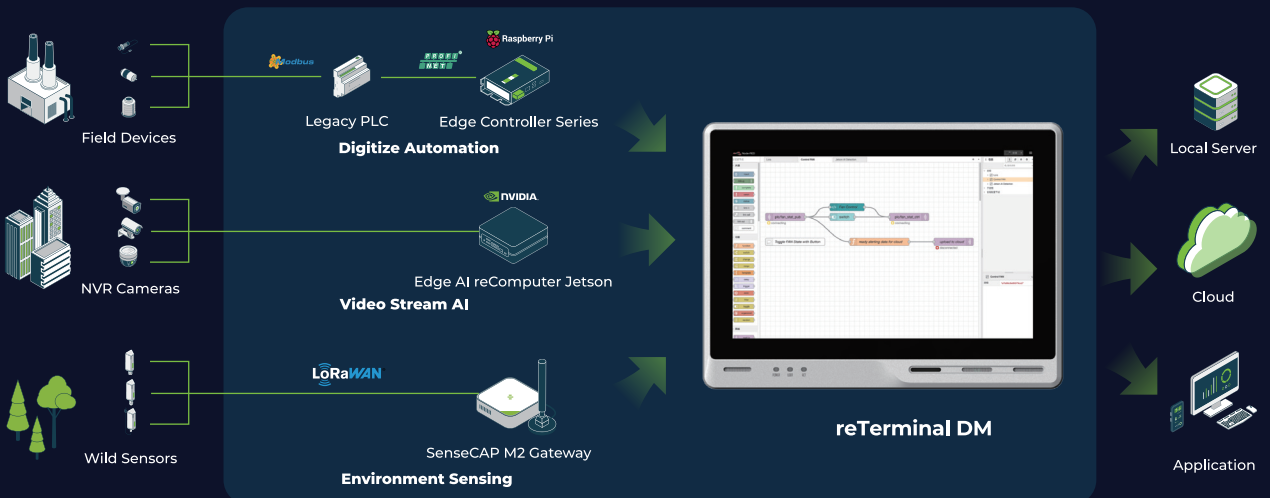


Open-source design in software and hardware
Raspberry Pi CM4 8GB RAM 32GB eMMC core, welcome customization or derivatives



Product warranty
Two-year warranty

An Integrated Device Master to Unify Data Flow and Manage Onsite Device



Application



Water
Treatment



Energy
Management



Production
Automation



Automotive &
Marine HMI

reTerminal DM Specification

Basic	
CPU	CM4 Quad-core Cortex-A72@ 1.5GHz
Memory	8GB RAM
Storage	32GB eMMC
	M.2 NVMe SSD Slot 2280-M Key *(optional) ^{1&2}
OS Support	Raspbian
	SenseCraft Edge OS
Display	
Size	10.1"
Max. Resolution	1280 x 800
Max. Colors	16.7M (8-bit)
Luminance (nit)	400
Viewing Angle (H/V°)	170/170
Backlight Life (hrs)	30000
Touch Type	10-point Capacitive
Pencil Hardness	7H
Video&Audio	
Video	HDMI 2.0
Audio	Microphone x 2
	Buzzer
	3.5mm Audio Jack
Camera	CSI *(optional) ³
Interfaces	
Ethernet	1 x 10/100/1000 Mbps
	2 x 10/100/1000 Mbps*(optional) ²
USB	2 x USB-A 2.0 Host
	2 x USB 3.0 *(optional) ⁴
RS485	1 x RS-485 > Terminal Block
	1 x RS-485 > DB9 *(optional) ⁵
RS232	1 x RS-232 > Terminal Block
	1 x RS-232 > DB9*(optional) ⁵
CAN	1 x CAN-BUS > Terminal Block
DI	4 x DI > Terminal Block
DO	4 x DO > Terminal Block
40 Pin GPIO	Inside
Wireless Communication	
Wi-Fi	On-chip Wi-Fi* ⁶
BLE	On-chip BLE
LoRa®	Mini-PCIe for LoRaWAN®
	*(optional) ^{7&8}
Cellular	Mini-PCIe for 4G *(optional) ^{9&10&15}

Power	
Input	2-pin Terminal Block
PoE	IEEE 802.3af Standard *(optional) ¹¹
Power Range	12-24V DC Note: No adapter in the standard product. ¹²
Power Consumption	6W Typ; 9W Max
Power Switch	NO
Reboot Switch	YES
Environment	
Ingress Protection	IP65 Front Panel
Operating Temperature	-10~50 °C
Storage Temperature	-20~70 °C
Humidity (Operating)	10~95% RH
Mechanical	
Dimension (W x H x D)	259.4 x 191 x 42.2mm
Enclosure	Die-cast Aluminum Alloy
Mounting	Panel* ¹³ , VESA, Din-Rail* ¹⁴ Note: No mounting accessories in the standard product
Weight (Net)	1.8Kg
Vibration Resistance	5 Grms random vibration (5 ~ 500 Hz) during operation, IEC60068-2-64
Shock Resistance	Operating 50 G peak(11ms duration), IEC 60068-2-27
Certification	
	CE; FCC; RoHS; UKCA; Telec; REACH
EMC	
ESD	EN61000-4-2, Level 3
EFT	EN61000-4-4, Level 2
Surge	EN61000-4-5, Level 2
Others	
RTC	High Accuracy RTC
Hardware WatchDog	1~255s
Security	ATECC608A
Warranty	2 Years
Heat Dissipation	Fanless

Options marked with an asterisk () require additional purchase of corresponding accessory with the corresponding part number in the accessories list

*The LoRa® Mark is a trademark of Semtech Corporation or its subsidiaries.



View the
User Manual



Know More and
Order Here!

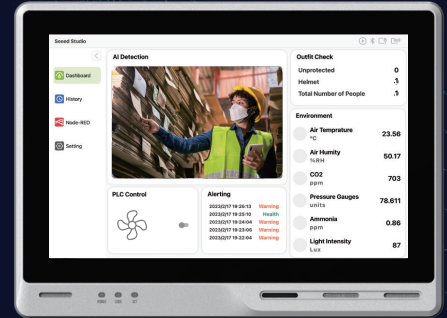
reTerminal DM Optional Version & Accessories

No.	Note	Product	Product Name	SKU
1	No.2 is also needed to realize SSD function		SSD	112990267
2	/		Dual LAN & SSD Extension Board	114993112
3	/		Dual DB9 Extension Board	114993111
4	This accessory is required to use DM WiFi Function.		CM4 WiFi/BLE Antenna Kit	114992364
5	No.5 & No.6 must be used together to realize LoRaWAN function.		LoRa Antenna Kit	110061501
6			Region optional LoRaWAN® Gateway Module (SPI)	US915 114992969 EU868 114993268
7	Please choose No.9 with No.7 for 4G function while choose No.9 with No.8 for GPS functio.		4G Antenna Kit	110061502
8			GPS Antenna Kit for reTerminal DM 4G Module	110061521
9			Region optional LTE Cat 4 Module	North American 113991134 EMEA and Thai 113991135
10	The two standard versions of reterminal DM do not come with built-in PoE capabilities. This module needs to be soldered onto the carrier board of the DM.		PoE Module Kit	110991925
11	/		Power Adapter	US 110061505 EU 110061506
12	/		Panel mount Kit	110061503
13	/		Din-Rail mount Kit	114070181

Customization Service

Customize, innovate, and make reTerminal DM truly yours today!

reTerminal DM is a real open-source Raspberry Pi CM4-powered 10.1" Integrated HMI - in terms of hardware and software, including schematics, PCB design files, Gerber files, and structural design files.



Customize
Logo



Flash
Firmware



Branding and
Labeling



Certifications



Add/Remove
Functional Modules

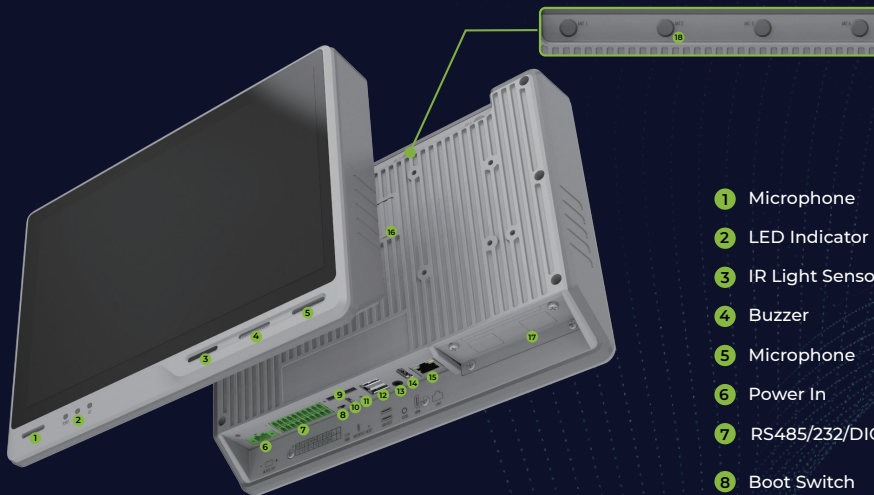


Modify I/O
Ports



Design
Enclosure

Hardware Overview



- | | |
|---------------------|---|
| 1 Microphone | 10 USB Device |
| 2 LED Indicator | 11 Reset Hole |
| 3 IR Light Sensor | 12 USB Host |
| 4 Buzzer | 13 Audio Out |
| 5 Microphone | 14 HDMI |
| 6 Power In | 15 1000M Ethernet |
| 7 RS485/232/DIO/CAN | 16 SSD Slot |
| 8 Boot Switch | 17 PCIe Flexible Extension Slot for Customizations |
| 9 SIM Slot | 18 4 Reserved Antennas Ports for Wireless Possibilities |

Supported Software



FRIGATE

YOLOv5



EDGE IMPULSE

N3uron



Contact

Email: distribution@seed.cc
Tel: +86 755 86095676
Official Website: seedstudio.com

Discuss your customization inquiry based on reTerminal DM with us at edge@seed.cc
Know More about Sseed Studio's Raspberry Pi-powered Devices:
<https://www.seedstudio.com/raspberry-pi>



Raspberry Pi
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