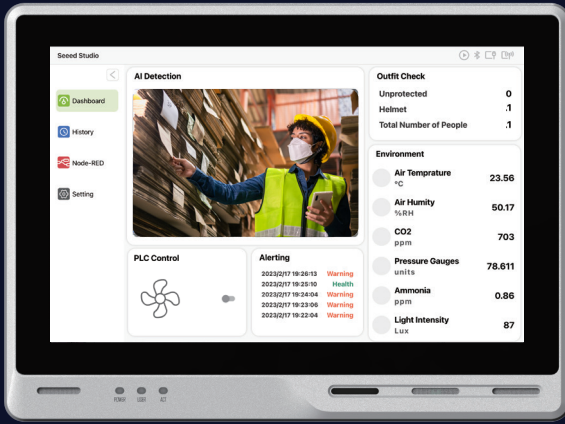


# reTerminal DM 10.1" Integrated Device Master



**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

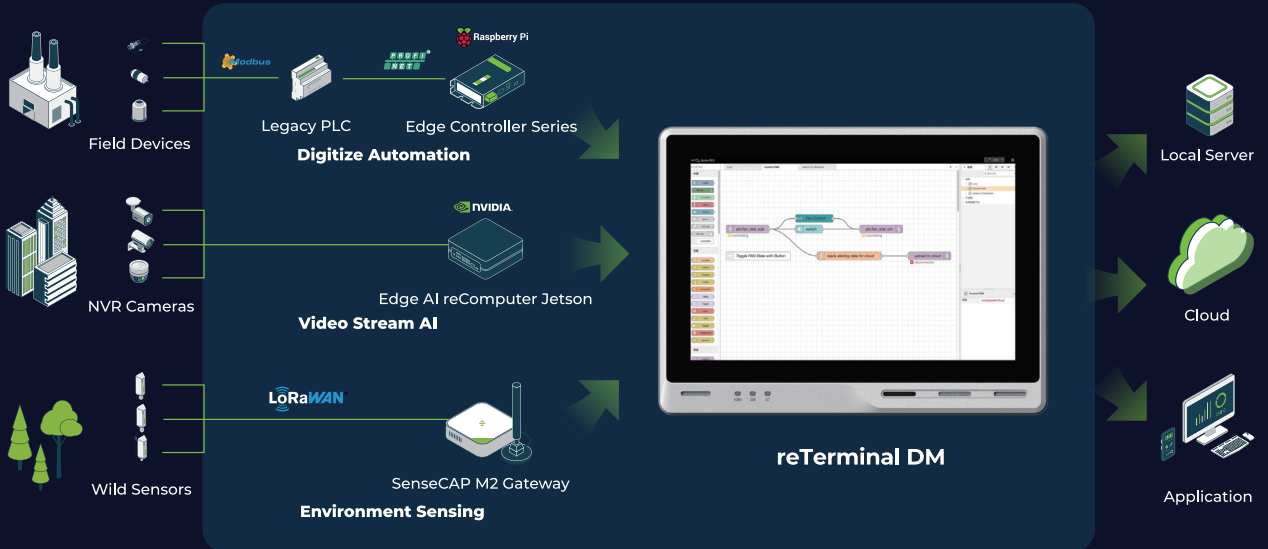


**Open-source design in software and hardware**  
Raspberry Pi CM4 8GB RAM 32GB eMMC core, welcome customization or derivatives



**Product warranty**  
Two-year warranty

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



## Application



# 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) <sup>1&amp;2</sup>
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) <sup>3</sup>
Interfaces	
Ethernet	1 x 10/100/1000 Mbps 2 x 10/100/1000 Mbps*(optional) <sup>2</sup>
USB	2 x USB-A 2.0 Host 2 x USB 3.0 *(optional) <sup>4</sup>
RS485	1 x RS-485 > Terminal Block 1 x RS-485 > DB9 *(optional) <sup>5</sup>
RS232	1 x RS-232 > Terminal Block 1 x RS-232 > DB9*(optional) <sup>5</sup>
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 <sup>6</sup>
BLE	On-chip BLE
LoRa®	Mini-PCIe for LoRaWAN® *(optional) <sup>7&amp;8</sup>
Cellular	Mini-PCIe for 4G *(optional) <sup>9&amp;10&amp;15</sup>

Power	
Input	2-pin Terminal Block
PoE	IEEE 802.3af Standard *(optional) <sup>11</sup>
Power Range	12-24V DC Note: No adapter in the standard product. <sup>12</sup>
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 <sup>13</sup> , VESA, Din-Rail <sup>14</sup> 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

<sup>8</sup>The LoRa® Mark is a trademark of Semtech Corporation or its subsidiaries.



View the  
User Manual



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## reTerminal DM Optional Version & Accessories

No.	Product	Product Name	SKU
1		SSD	112990267
2		Dual LAN & SSD Extension Board	114993112
3		reTerminal DM device with Camera & PoE version	114070221
4		Dual USB3 Extension Board	114993113
5		Dual DB9 Extension Board	114993111
6		CM4 WiFi/BLE Antenna Kit	114992364
7		LoRa Antenna Kit	110061501
8		Region optional LoRaWAN® Gateway Module (SPI)	US915 114992967 EU868 114992549
9		4G Antenna Kit	110061502
10		Region optional LTE Cat 4 Module	North American 113991134 EMEA and Thai 113991135
11		PoE Module Kit	110991925
12		Power Adapter	US 110061505 EU 110061506
13		Panel mount Kit	110061503
14		Din-Rail mount Kit	114070181
15		GPS Antenna Kit for reTerminal DM 4G Module	110061521

# Customization Service



## Custom Design reTerminal DM, Powered by Raspberry Pi CM4

- 

Replace CM4
- 

Interface Modification
- 

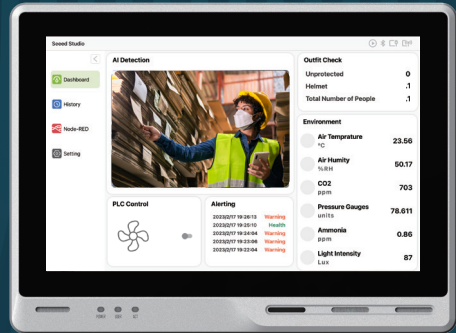
Image Flashing
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Logo change
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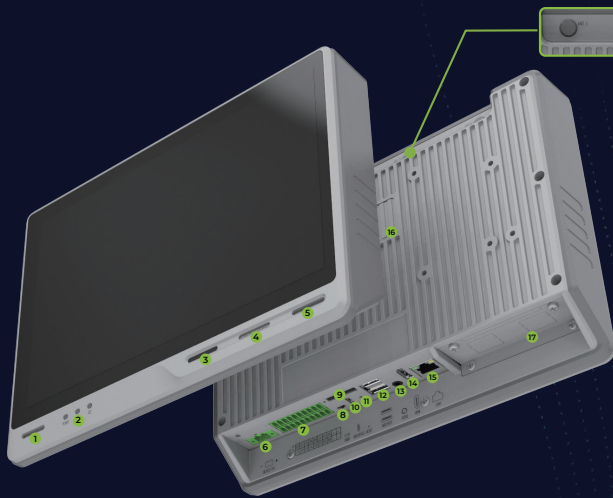
Others

### reTerminal DM Open Block Diagram

A Panel PC, HMI, PLC, IIoT Gateway all-in-one device powered by Raspberry Pi CM4, with 10.1" IP65 front panel and rich industrial interfaces, natively integrated with Node-RED



# Hardware Overview



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

### Contact

Email: [distribution@seeed.cc](mailto:distribution@seeed.cc)  
 Tel: +86 755 86095676  
 Official Website: [seeedstudio.com](http://seeedstudio.com)

Download Catalog (PDF & Video)  
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Discuss your customization inquiry based on reTerminal DM with us at

<https://www.seeedstudio.com/odm-service.html?schema=Raspberry%20Pi%20Device%20Customization>  
 or contact us at [odm@seeed.cc](mailto:odm@seeed.cc)

Check Seeed Studio's Raspberry Pi Series Catalog:

<https://files.seeedstudio.com/wiki/raspberry-pi/seeed-studio-raspberry-pi-series-catalog-v1.1.pdf>

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