EMS product

+ Features

👍 **Linux operating system**
- Safe, efficient and reliable

🗇 **Highly integrated**
- Ethernet、CAN、4G、RS485、RS232
- Support LVDS video output

☑ **High reliability**
- All external interfaces are optical coupler/transformer isolated

⌘ **Varied features**
- Dynamic pressure regulation
- Peak-valley arbitrage
- Demand response
- Smoothing power fluctuation

Parameters	Indicators and requirements
CPU	STM32MP157 series microprocessor：ST Cortex-A7 + Cortex-M4 heterogeneous triple-core Main frequency 800MHz
Memory	Default configuration 1G DDR3 SDRAM
FLASH	The default configuration is 8GBeMMc, extensible
Expanded storage	1 Micro SD Card (TF card)，(Max. 32G) Plug-in installation
Touch screen connector	24-bit LVDS connector, 4-wire resistance touch screen connector, 4-wire backlight power supply connector, DVI connector supports brightness adjustment of backlight, 10-level brightness adjustment
Mobile Communication	support full network communication include China Mobile, China Unicom, China Telecom 2G/3G/4G; 1 standard SIM card slot for plug-in installation; Support hot swapping, and the built-in software for thermal switching
Network	RJ45-01: 10/100/1000BASE-T adaptive fast Ethernet, standard RJ45 interface, 1500Vrms isolated transformer RJ45-02: 10/100BASE-T adaptive fast Ethernet, standard RJ45 interface, 1500Vrms isolated transformer
Serial port (7)	2 lines of RS232, 3000VDC optical coupler isolation, output through Phoenix connector; 5 lines of RS485, 3000VDC optical coupler isolation, output through Phoenix connector.
CAN BUS	CAN-01: CAN2.0B, baud rate up to 1Mbps. 3000VDC electroplating isolation, output through Phoenix connector. CAN-02: CAN2.0B, baud rate up to 1Mbps. 3000VDC electroplating isolation, output through Phoenix connector.
DI/DO	Four lines Digital input (DI) and output through Phoenix contact. External 3000VDC isolated optocoupler inputs to dead contact. Four lines Digital onput (DO), 10A/125DAC relay dry contact output, leads through the Phoenix contact.
USB	USB-01: USBHOST, outlet, USBA Port. inserting a USB to drive. USB-02: USBHOST, outlet, USBA Port. inserting a USB to drive.
Debugging interface	1-line debugging interface, standard DB-9 connector as the debug serial interface
Power supply	Input rated voltage: DC12V, input range: DC9V -15V, and RCP is available. Rated input power: 20W Provide external 5V output power for the card reader, output power ≤ 2W
Dimension	W*D*H = 194X141X65 (mm)
Installation	Rail type installation or fix with screws
Software environment	Linux kernel version：5.10.61　　　GCC-8.2　　　QT：5.11.2
Working and storage environment	Humidity：5 %～95 %, no condensation Working temperature：-40℃～+85℃　　Storage temperature：-55℃～+85℃