

MEGMEET HVAC Driver and Control Solution

Industrial Power Supply

- Telecom Power
- Server Power
- Electric Power
- Medical Power
- High-voltage Power
- Display Power
- Solar Energy
- Energy Storage
- Charging Solution
- OA Power
- Enclosed Power

Industry Automation

- AC Drive
- Servo System
- Control System
- Encoder
- IoT
- Internal Gear Pump
- Vehicle Integration Controller
- Elevator Integration Controller

New Energy Vehicle & Rail Transit

- OBC
- DC-DC
- Inverter
- PEU
- E-Compressor
- Thermal System
- Motor Driver
- PFC
- Air-conditioning Controller

Intelligent Equipment

- Intelligent Digital Welding Machine
- Industrial Microwave Equipment
- Electric Submersible Progressing Cavity Pumping (ESPCP) System

Smart Home Appliances

- Heat, Ventilation, Air-conditioning (HVAC)
- Cold Chain & Refrigeration
- Washing Machine & Dryer
- Kitchen Electronics
- Smart Bidet

Connecting Cable

- FFC
- FPC
- Varnished Wire
- Mini Coaxial Cable

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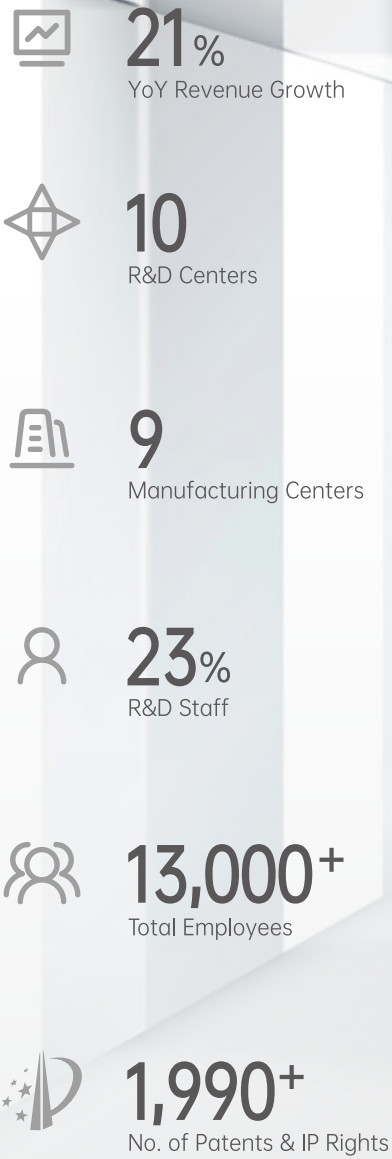
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About MEGMEET

MEGMEET is a \$1.2B global power and energy company specializing in high-efficiency power solutions for datacenters, eMobility, healthcare, industrial automation and renewable energy. With R&D, manufacturing facilities and global operations across North America, India, Thailand, China and Germany, MEGMEET is Engineered to Empower™ the future of HVAC Driver and Control Solution.



Global Manufacturing Centers



Professional Testing Platform



RE Lab (10M, 3M*2)



Burn-In Lab



Climate Environment and Reliability Lab



Highly Accelerated Life Test Lab



High-speed Bench Testing



Mechanical Reliability Lab



Surge Testing



EMS Testing Laboratory



Electrical and Electronic Performance Testing



Enthalpy Testing



Refrigerator Lab



Washing Machine Lab

Testing Capabilities & Management System



MEGMEET's testing capabilities and management system have been certified by CNAS, TÜV, UL-WTDP & UL-CTF. MEGMEET's test results are recognized globally.

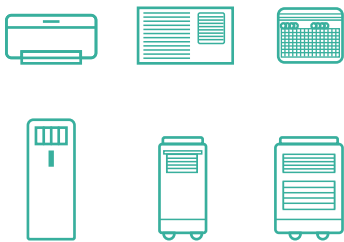
MEGMEET HVAC Driver and Control Solution

MEGMEET is a professional solution provider of power electronic and industrial control. Based on the core technology platform of motor drive, power conversion and system control, MEGMEET is rapidly expanding the diversified solutions for the HVAC industry, we can provide one-stop driving and control solutions for all application in home appliance section. Products and solutions, with higher performance and other technical advantages, are dominating the market all across the fields. We are constantly innovating new technology to keep the competitiveness, in additional, we are also focusing on prompt and high efficient service response.

Products have been widely used in residential air conditioning, light commercial air conditioning, heat pump for space heating, vehicle air conditioning, special air conditioning, refrigerator and washing machine and other fields.

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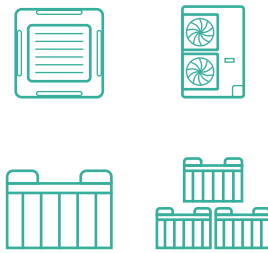
Driver & Control Solution for Residential Air Conditioner



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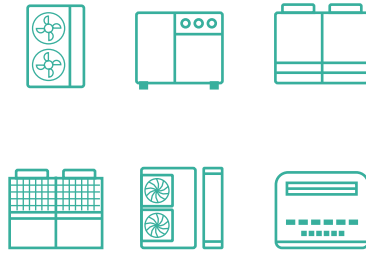
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Driver & Control Solution for Residential Air Conditioner

The temperature and humidity of indoor environment have a certain impact on human health and the storage of goods. Adhering to the concept of customer first, MEGMEET continues to upgrade technology for better experience products. According to the users' behaviors, MEGMEET residential air conditioner products meet the personalized customization needs of customers in different scenarios with flexible and intelligent solutions.

Product Series



Wall-mounted AC controller



Floor and standing AC controller



WAC controller



PTAC controller

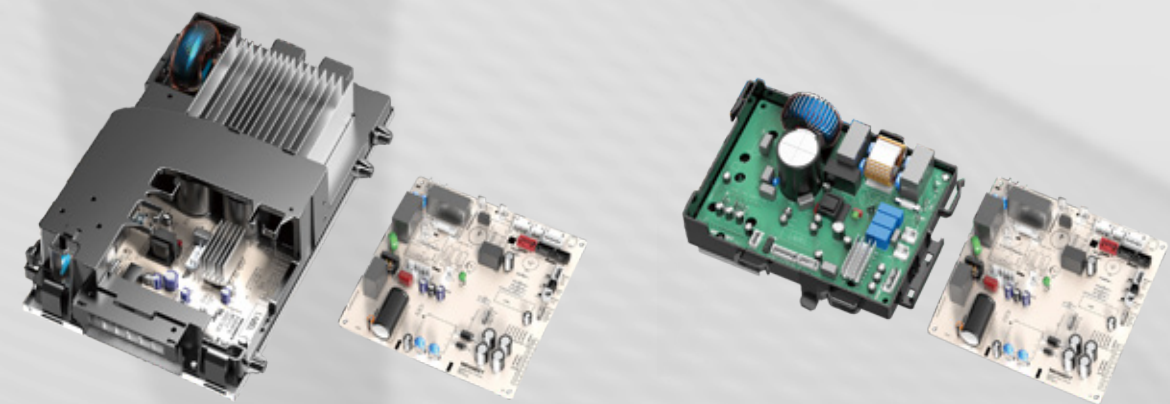


Portable AC controller



Dehumidifier controller





Horizontal mounting series

Vertical mounting series

Characteristics

- 180° sine wave vector control
- Self-adapting and intelligent vibration suppression technology
- High frequency flux-weakening technology
- MTPA control technology
- Core algorithm of the compressor driver with independent intellectual property rights
- Active high frequency & inbuilt PFC reactor

Application

Applicable product range: single phase, 7K ~ 60K BTU.
Apply to wall-mounted AC, floor and standing AC, side discharge and top discharge AC,window AC /PTAC, portable AC, dehumidifier and etc.



Product Parameters

Scope of Application	Rated Cooling Capacity	7K ~ 60K BTU
	Rated Working Voltage	(1 phase) 220V
	Voltage Range	AC 120V ~ 300V
	Power Supply Frequency	50/60Hz±5%
	Power Range	0.75kW ~ 7.5kW
	Standby Power	<1W
	Power Factor	>0.98@full load
	Working Temperature	Temperature: -20℃ ~ 55℃
Input	Working Humidity	Humidity≤90% non-condensing
	Compressor Speed	15rps ~ 120rps
	Fan Motor Control	Option: AC motor, BLDC fan with drive, controller inbuilt BLDC fan drive
Output	Other	(4-way valve, EEV,electrical heater and etc.)
	Communication Mode	Current loop communication; serial port communication
Safety	GB4706.32/IEC/EN 60335-2-40	
EMC	EN55022 CLASS B EN55014	

Driver & Control Solution for Commercial Air Conditioner

Energy saving and emission reduction become the theme of today's world. The control solutions of Megmeet commercial AC, aiming at the new requirements of customers for the comfort, economy, convenient management and particularity of commercial air-conditioning environment, greatly reduce the equipment downtime, prolong the service life of the unit and ensure the user's demand for air-conditioning comfort with cost-effective control system solutions.

Product Series



Unitary (duct/cassette/ceiling) controller



Mini VRF controller



VRF controller



Modular unit controller





Characteristics

- 180° sine wave vector control
- Self-adapting and intelligent vibration suppression technology
- High frequency flux-weakening technology
- Core algorithm of the compressor driver with independent intellectual property rights
- 3 channels & 3 phase interleaving PFC technology
- Centralized controller; remote monitoring system; billing system

Application

Applicable product range: 1 phase, 1.5HP ~ 8HP; 3 phase, 5HP ~ 24HP.
Apply to VRF units, cassette units, floor & ceiling units duct units, unitary inverter and modular units.



Product Parameters

Scope of Application	Rated Cooling Capacity	1.5HP ~ 24HP
	Rated Working Voltage	(1 Phase) 220V ;(3 Phase) 380V
	Voltage Range	(1 Phase) 120VAC ~ 280VAC; (3 Phase) 280VAC ~ 480VAC
	Power Supply Frequency	50/60Hz±5%
	Maximum Input Power	(1 Phase) 8kW; (3 Phase) 30kW
	Maximum Input Current	(1 Phase) 36A; (3 Phase) 50A
	Working Temperature	Temperature: -20℃ ~ 55℃
Input	Working Humidity	Humidity≤90% (non-condensing)
	Compressor Speed	15rps ~ 120rps
	Fan Motor Control	Option: AC motor, BLDC fan with drive, controller inbuilt BLDC fan drive
Output	Other	4-way valve Electrical heater, solenoid valve, EEV, high and low pressure switch and etc.
	Communication Mode	1.Current loop communication 2.RS485
Driver Cooling Mode	1.Air cooled 2.Liquid cooled 3.Inbuilt fan motor with drive	
	Safety	GB4706.32/IEC/EN 60335-2-40
	EMC	EN55022 CLASS B EN55014

Driver & Control Solution for Space Heating

The control solutions of MEGMEET heat pump series products aim to improve energy efficiency and product reliability through technological innovation and optimization of control system, combined with advanced driving technology. Our products are designed to save energy and reduce the impact of the system on the environment.

Product Series



Air-source heat pump controller



Water-source heat pump controller



Triple supply heat pump controller



Swimming pool heat pump controller



Water heat pump water heater



Air cooled heat pump controller





Heat pump series

Characteristics

- 3 channel & 3 phase interleaving PFC technology
- The core algorithm of compressor driver
- 180° sine wave vector control technology
- Self-adapting vibration suppression technology
- High frequency flux-weakening technology
- Magnetic saturation control technology
- EVI control solution for -30℃ application environment

Application

Applicable Range: 1 phase, 1.5HP ~ 8HP; 3 phase, 5HP ~ 24HP.
Apply to air-source heat pump, water-source heat pump, triple supply heat pump, swimming pool heat pump, heat pump dryer, special heat pump system and etc.



Product Parameters

Scope of Application	Rated Heating Capacity	1.5HP ~ 24HP
	Rated Working Voltage	(1 Phase) 220V; (3 Phase) 380V
	Voltage Range	(1 Phase) 120VAC ~ 280VAC; (3 Phase) 280VAC ~ 480VAC
	Power Supply Frequency	50/60Hz±5%
	Maximum Input Power	(1 Phase) 8kW; (3 Phase) 30kW
	Maximum Input Current	(1 Phase) 36A; (3 Phase) 50A
	Working Temperature	Temperature: -40℃ ~ 55℃
	Working Humidity	Humidity≤90% (non-condensing)
Input	Compressor Speed	15rps ~ 120rps
	Throttle Valve	EEV
	EVI	EVI
	Other	4-way valve, electrical heater, solenoid valve, 3-way valve, water pump, high and low pressure switch and etc.
Output		
Communication Mode	1. RS485	
	2. Serial port communication	
Cooling Mode of Inverter Drive	Multiple options of driver cooling mode	
	1.Air cooled 2.Liquid cooled 3.Inbuilt fan motor with drive	
Safety	GB4706.32/IEC/EN 60335-2-40	
EMC	EN55022 CLASS B EN55014	

Driver & Control Solution for Automotive

The automobile air conditioning system is a device for cooling, heating, changing air and purifying the air in the car. It can provide a comfortable riding environment for the crew, reduce the fatigue strength of the driver and improve the safety of driving. MEGMEET driver & control solution for automotive enable our customers to quickly deploy new systems, add functions to their vehicles, improve core competitiveness, and reduce overall development cost.

Product Series



Truck vehicle parking AC controller



RV AC controller



Refrigerator vehicle controller

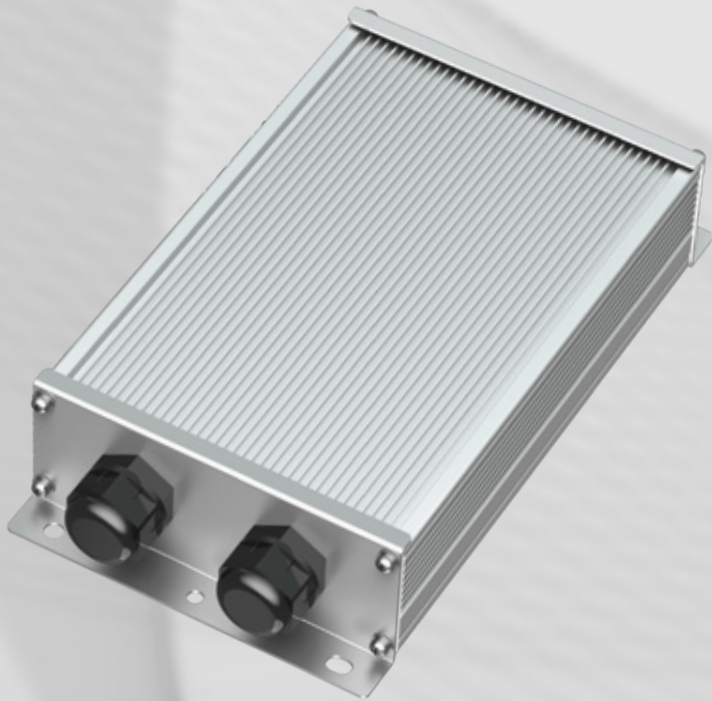


Engineering vehicle controller



Thermal management controller of automotive batteries





Characteristics

- The core algorithm of compressor driver
- 180° sine wave vector control technology
- Self-adapting vibration suppression technology
- High frequency flux-weakening technology
- Magnetic saturation control technology
- Meet the certification of automotive
- Good heat dissipation, meet climatic conditions of vehicle -25℃ to 60℃

Application

Apply to truck, passenger car, refrigerator vehicle, engineering vehicle, RV air vehicle and special vehicle etc.



Product Parameters

Input	Rated Working Voltage	DC 12V, 24V, 48V
	Voltage Range	DC 10VDC ~ 32VDC, 16VDC ~ 60VDC
	Maximum Input Power	1.8kW
	Maximum Input Current	100A
	Working Temperature	Temperature: -30℃ ~ 60℃
	Working Humidity	Humidity≤90% (non-condensing)
Output	Compressor Speed	600rpm ~ 6000rpm
	Fan Motor Control	BLDC fan motor
	Other	4-way valve, EEV and etc.
Communication Mode	1. RS485 2. Voltage 3. PWM	
Driver Cooling Mode	Natural convection cooling with profiles heat sink	
Safety	GB4706.32/IEC/EN 60335-2-40	

Driver & Control Solution for Solar & Other Application

MEGMEET driver & control solution for solar & other special application is based on the series of safety and reliability, and through the research project on the base of PV, the special environment and technology of long-term accumulation of experience. The production system improves the quality of industrialization, so as to ensure the reliability and stability of the whole system. It helps customers optimize system design and carry out comprehensive intelligent management, improve system efficiency level, reduce operation cost, and ensure that the system maintains the best performance in the whole life cycle.

Product Series



Solar AC controller

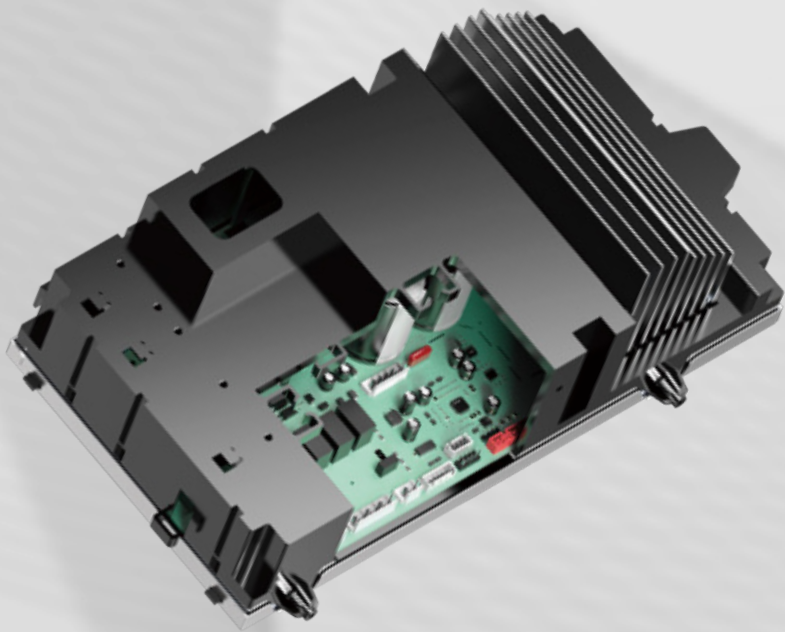


Special AC controller



Energy storage air conditioner





Solar AC controller series

Characteristics

- Full digital control algorithm solution, it can switch between solar and power grid automatically
- Implementing MPPT algorithm to make AC use the power from solar panel as much as possible
- 180° sine wave vector control technology
- Self-adapting vibration suppression technology
- High frequency flux-weakening technology
- Magnetic saturation control technology

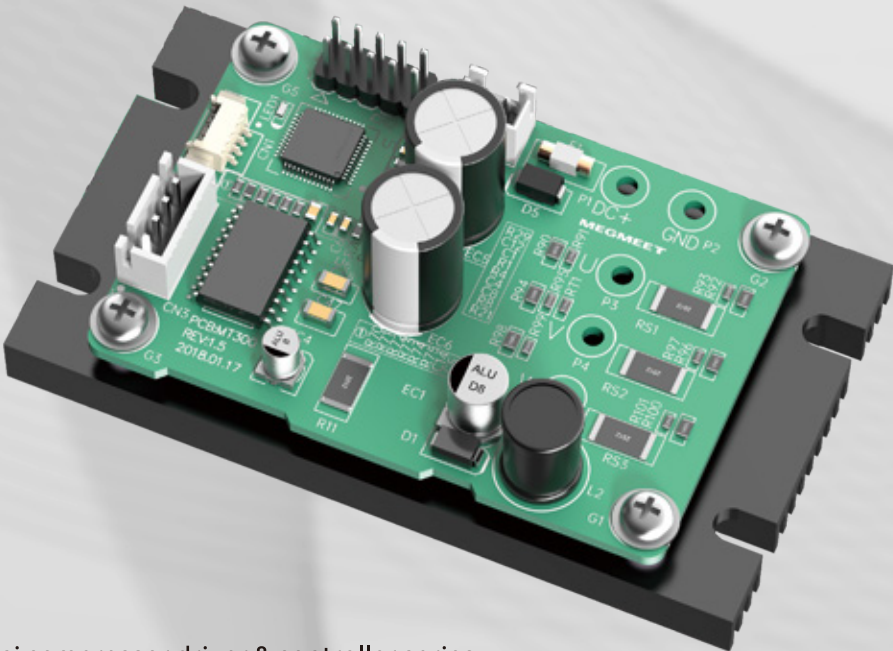
Application

Applicable to hybrid solar AC, energy storage air conditioner an other products.



Product Parameters

Scope of Application	Rated Heating Capacity	9K ~ 24K BTU
	AC Voltage Range	(1 Phase) 120VAC ~ 280VAC
Input	Power Supply Frequency	50/60Hz±5%
	Maximumn Input DC Current	3.3kW
	DC Input Voltage Range	DC 100V ~ 300V
	Max incoming DC Current	10A
	Maximum Input Current	15A
	Working Temperature	Temperature: -20℃ ~ 55℃
	Working Humidity	Humidity≤90% (non -condensing)
	Compressor Speed	15rps ~ 120rps
Output	Fan Motor Control	Options: BLDC fan with drive, controller inbuilt BLDC fan drive
	Other	EEV, 4-way valve, electrical heater
Communication Mode	Current loop communication	
Cooling Mode of Inverter Drive	Air cooled	
Safety	GB4706.32-2012/IEC/EN 60335-2-40	
EMC	GB4343.1-2018 EN55014	



Mini compressor driver & controller series

Characteristics

- 180°sine wave vector control technology
- Self-adapting vibration suppression technology
- High frequency flux-weakening technology
- Applied high speed IPM/IGBT, low noise and low power loss, improve efficiency and reliability

Application

Applicable to 24V, 48V portable AC and tent AC.



Product Parameters

Input	Voltage Range	18VDC ~ 63VDC
	Max Incoming DC Current	15A
	Standby Power	<1W
	Maximum Power	400W
Output	Compressor Drive	180° (sine wave)
	Sensor Precision	0.1°C
	Other	OLP, adjustable frequency, dial switch selection
	Protect	OCP/OVP
Safety	GB4706.32-2012/IEC/EN 60335-2-40	
EMC	GB4343.1-2018 EN55014	

Driver & Control Solution for Cold Chain & Refrigeration

MEGMEET is actively committed to developing advanced technology of driver & control solution for refrigerator, such as advanced technology of refrigeration and food preservation. MEGMEET can provide one-stop solution for refrigerator drive and control. Products lead the market with high performance, high quality, high reliability and other technical advantages.

Product Series



Refrigerator controller

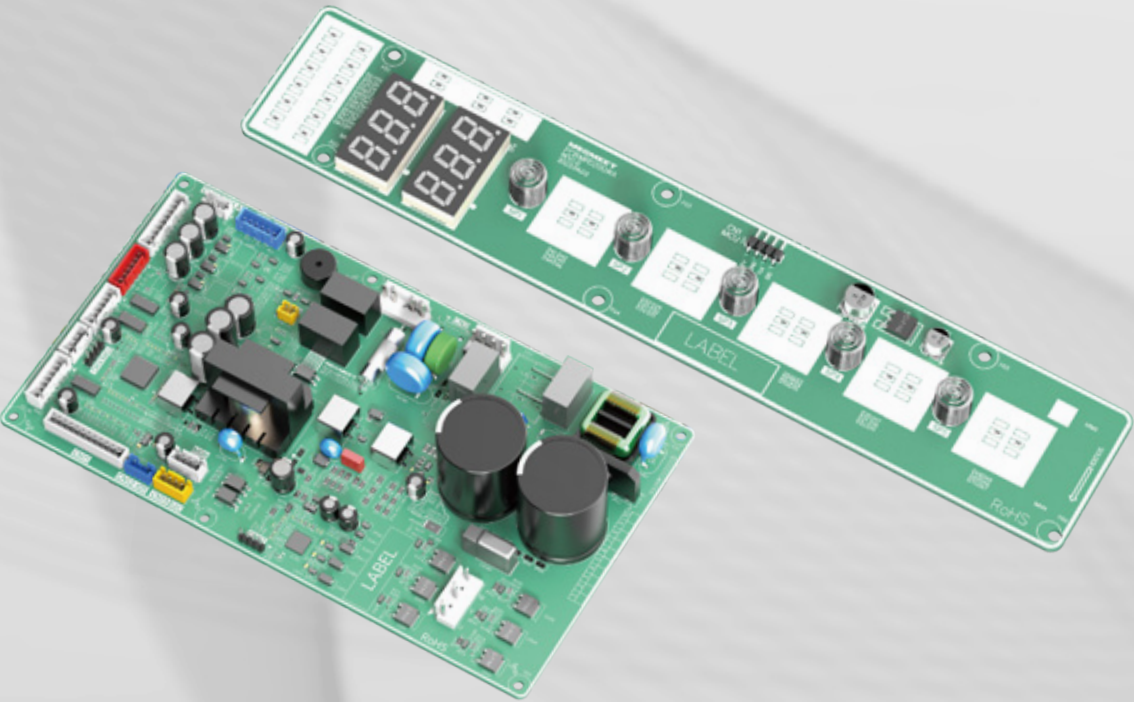


Freezer controller



Fresh-keeping cabinet





Characteristics

- Core driving algorithm of independent intellectual property
- 180° sine wave vector control technology, high driving efficiency
- Weak magnetic control technology, wide compressor speed operation range and improve the operation stability of compressor
- Switching mode power supply technology, wide voltage operation

Application

Applicable to all types of refrigerators with single door, double doors, three doors, multiple doors, opposite doors, as well as other types of refrigerators and wine cabinets.



Product Parameters

Scope of Application	Max Applicable Capacity	800L
	Rated Working Voltage	(1 Phase) 220V
	Voltage Range	120VAC ~ 284VAC
	Power Supply Frequency	50/60Hz±5%
	Maximum Power Consumption	300W
Input	Compressor Control	Smart fuzzy control
	Speed Range	1200rpm ~ 4500rpm
	Control Mode	PWM, voltage, serial port
Output	Display	LED, LCD, TFT and multiple optional display, it can be customized design
	Key Mode	Touch mode, press button
HMI	Operating Temperature	-10℃ ~ +55℃
	Related Humidity	Humidity≤90% (non-condensing)
Operating Environmen		
Safety	Gb4706, En60335, IEC60335	
EMC	GB/T 17626, IEC61000, EN50082	

Driver & Control Solution for Washing Machine and Dryer

MEGMEET is actively committed to developing advanced technology of driver & control solution for washing machine. MEGMEET can provide one stop solution for washing machine drive and control. Products are widely used in inverter and fixed speed front load washing machine, top load inverter washing machine and fixed speed top load washing machine, inverter heat pump clothes dryer and other products, giving users friendly laundry experience.

Product Series



Front load washing machine controller

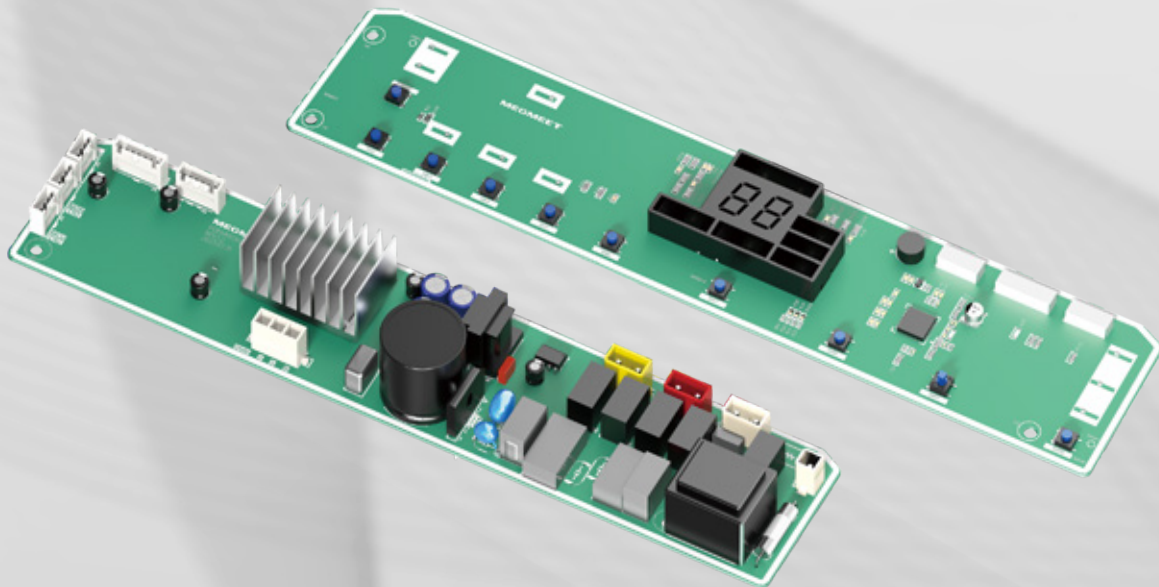


Top load washing machine controller



Heat pump dryer controller





Characteristics

- Senseless FOC technology, speed closed-loop control, more accurate control
- Dead-time compensation technology, reduce motor noise effectively
- Torque control technology, startup quickly with high torque
- Weak magnetic control technology, wide motor speed operation range and improve the operation stability of motor
- Fuzzy weighing technology, recognize clothing weight intelligently with efficient laundry experience

Application

Applicable to front load washing machine, top load washing machine and heat pump dryer, it is suitable for BLDC motors, direct drive motors and universal motors.



Product Parameters

Scope of Application	Max Applicable Capacity	3KG ~ 13KG
	Rated Working Voltage	(1 Phase) 220V
	Voltage Range	150VAC ~ 284VAC
	Power Supply Frequency	50/60Hz±5%
	Wash and Spin Power	150W ~ 650W
Input	Control Mode	Smart fuzzy control
	Applicable Motor Type	BLDC, DD (universal motor)
	Max Spin Speed	1600rpm (Front load) 1000 (Top load)
Output	Display	Using LCD/LED to dynamically display the operation situation of washing machine
	Key Mode	Touch mode, press button
HMI	Operating Temperature	-20℃ ~ +60℃
	Related Humidity	Humidity≤90% (non-condensing)
Operating Environment		
Safety	GB4706, EN60335, IEC60335	
EMC	GB/T 17626, IEC61000, EN50082	

Global Infrastructure for Scalable Engineering Solutions

MEGMEET operates a robust global framework comprising 10 advanced R&D centers, 9 vertically integrated manufacturing facilities, and 24 strategically positioned regional offices. This infrastructure enables accelerated product development cycles, optimized supply chain logistics, and region-specific engineering support. Our distributed architecture ensures low-latency response times, seamless integration with local standards, and scalable deployment across diverse industrial and commercial applications.

Global Engineering & Field Application Support Network

MEGMEET's international engineering infrastructure is built to enable close technical collaboration and on-site application expertise. With design and support centers in China, Germany, Thailand, and the United States, we ensure rapid integration of customer requirements into product architecture, efficient validation in real-world environments, and agile adaptation to regional standards. Our global presence empowers field application engineers to deliver scalable, reliable, and performance-optimized solutions across a wide range of industries.

