

1000D	Daikin
2000S	Sanyo
3000T	Toshiba
4000M	Mitsubishi Electric
5000C	Custom Designed
6000L	LG
7000F	Fujitsu
8000MH	Mitsubishi Heavy
9000H	Hitachi

CoolMaster

RS232 Interface Adapter for VRV, VRF Air Conditioning Systems

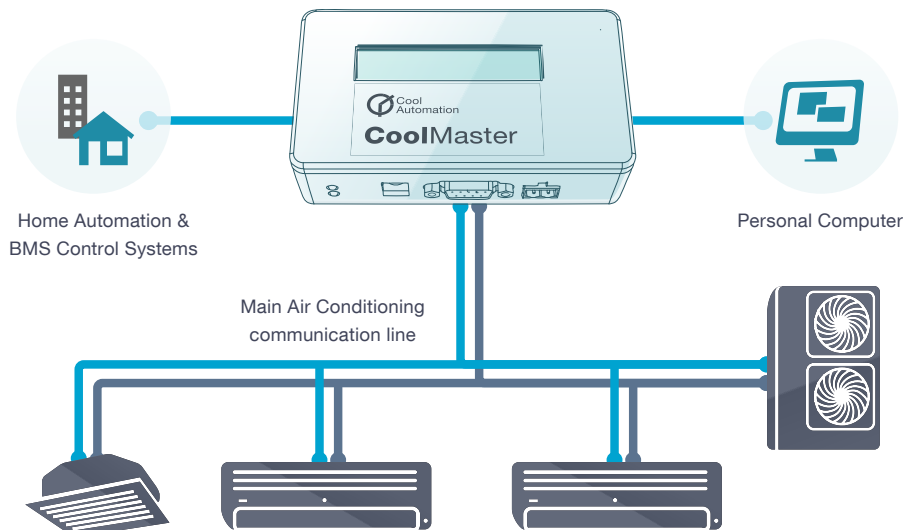


CoolMaster is a versatile seamless control adapter connecting VRV/VRF Air Conditioning systems with any RS232 or USB featured devices like Home PCs, Embedded PCs or Home Automation Controllers.

Connecting such Controllers through common RS232 or USB interfaces with the CoolMaster will provide end-users with full control of all indoor units enabling them with access to HVAC's various functionalities including diagnostic.

Home Automation Integrators and HVAC installers when utilizing CoolMaster will not have to worry anymore about the complexity involved in understanding and working with internal Communication lines, gateways and unique physical layer when supported by the HVAC manufacturers.

Now, with the CoolMaster integrators will be provided only with a simple, well documented open ASCII protocol over RS232 or USB to seamlessly integrate with any Home Automation applications.



CoolAutomation

info@coolautomation.com

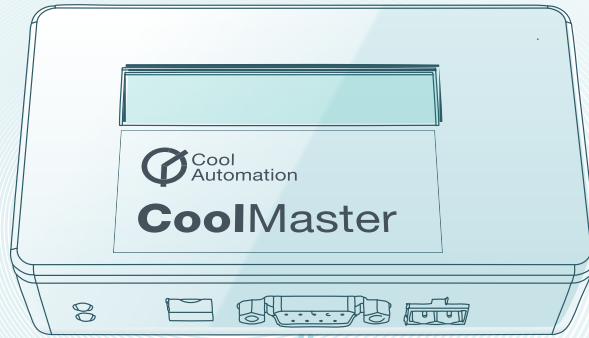
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Compatible Systems

1000D Daikin • 2000S Sanyo • 3000T Toshiba • 4000M Mitsubishi Electric • 6000L LG • 7000F Fujitsu • 8000MH Mitsubishi Heavy • 9000H Hitachi



Full Control over Indoor Units Operation

- On/Off control
- Cool | Heat | Fan | Dry mode selection
- Set Temperature Control
- Fan Speed Control
- Swing Control (for wall mounted and cassette types)
- Filter Reset Sign
- Group Operations (All On, All Off)

CoolMaster unit can be extended

for additional functionality such as I/Os, RS485, MODBUS, C-Bus (under development) using the CoolGate version.

Connectivity with split HVAC systems

CoolMaster can also be used for the integration of smaller split air conditioning systems. In this case an interface adapter supplied by the HVAC manufacturer will have to be used for each indoor unit. (Some cases also for each outdoor unit)



Outdoor and Indoor Units Monitoring

- Failure Alarms
- Set point temperature
- Operation status (on/off)
- Operation mode (cool/heat/fan/dry)
- Fan speed (high/medium/low/auto)
- Filter sign
- Swing



Seamless Integration

Interfacing Home Automation Controllers with CoolMaster is a simple and straight forward process requiring only common ASCII commands over RS232 communication line.

Same RS232 Interface

All CoolMaster models provide the same RS232 interface for all VRV/VRF HVAC Systems. So for instance, a home automation application, where a Daikin VRV system is connected via CoolMaster 1000D, will function exactly the same way for Mitsubishi VRF, Sanyo VRF, Toshiba VRF etc', when using CoolMaster models: 4000M, 2000S, 3000T respectively. No special interface adaptation will be required to migrate from one CoolMaster type to another.

System Diagnostics (Optional for advanced users)

Outdoor Units internal parameters: Condensing, Evaporation, Ambient Temperatures, EV Opening, System Power Consumption (current), Inverter Revolutions and others. Indoor Units internal parameters: Return Air, Gas and Liquid Temperatures, EV Opening.



Field Upgradable

New Firmware can be uploaded via RS232 port using a PC or Laptop. No need to open unit to change its functionality.



Plug and Play Device

The system is ready to work and no additional configuration set up will be required after making all wiring connections, supplying the power and defining addresses of the indoor units.