DAIKIN

VRV

DIII-NET/Modbus Adapter

Connect VRV System through Modbus Protocol

The DIII-NET/Modbus Adapter enables the connection of VRV system through Modbus communication to an automated frontend system. With this adapter, third-party controllers can monitor and control VRV indoor units through the RS485 Modbus Protocol. This adapter can be mounted to the VRV outdoor or indoor unit. A maximum of 2 outdoor units and 16 indoor units can be connected to the adapter.
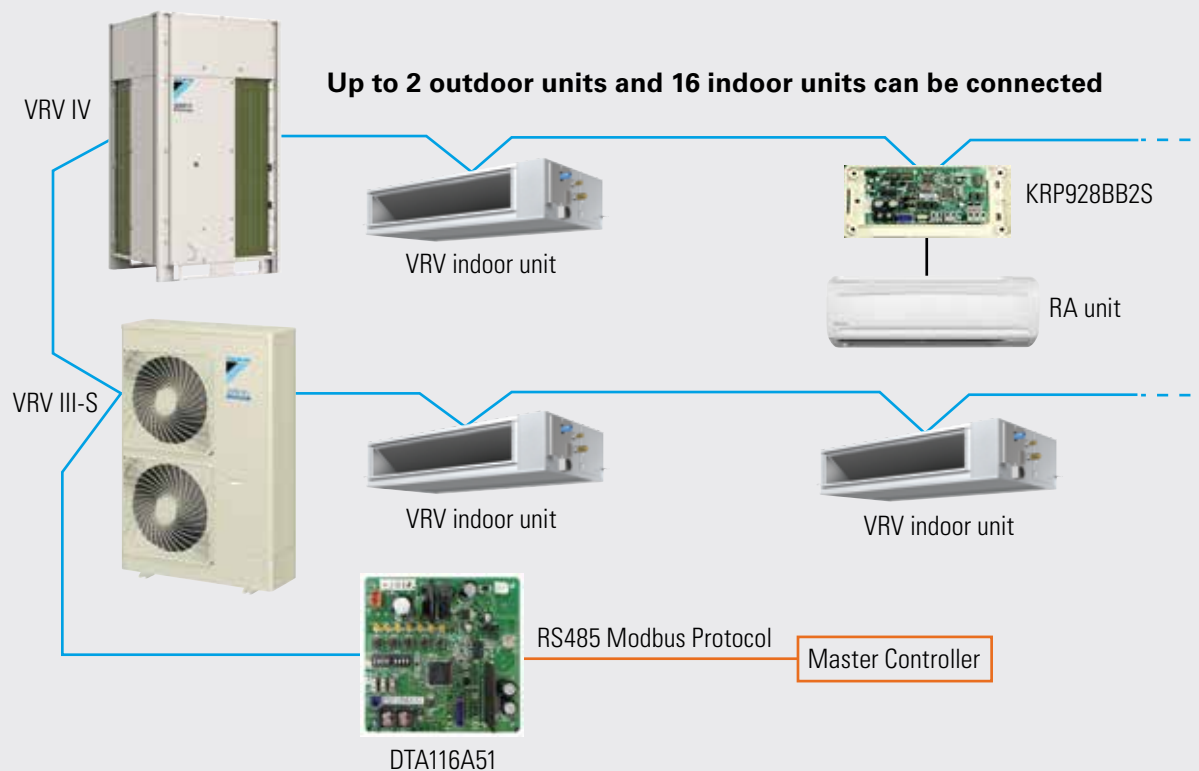
Model Compatibility

For use with the following VRV outdoor unit models: RXYQ_TTJU, RXYQ_TYDN, RXYMQ_PVJU*

For use with all VRV indoor unit models and the following SkyAir indoor units: FAQ, FBQ, FCQ, FHQ, FTQ

For use with the following Daikin Ductless indoor unit models: CDXS, CTXS, FDXS, FTXS, FTXN (FTXN requires KRP980B1/2 interface adapter) with the use of the KRP928BB2S (DIII-Net Adapter)

*Notes:
1. Outdoor unit models not listed above will require a separate 16 VDC field supplied power supply and mounting box.
2. For outdoor units not listed above the adapter may be mounted in the indoor unit and used to provide 16 VDC to the adapter.

Up to 2 outdoor units and 16 indoor units can be connected

VRV IV

VRV indoor unit

KRP928BB2S

RA unit

VRV III-S

VRV indoor unit

VRV indoor unit

RS485 Modbus Protocol

Master Controller

DTA116A51

SPECIFICATIONS	
Connection	DIII-NET (F1F2)
Protocol	Modbus (RS485)
Connectable indoor units	Up to 16 VRV indoor units
Connectable outdoor units	Up to 2 VRV outdoor units
Communication wire	18AWG-2, no polarity, stranded, non-shielded
Total wiring length	less than 1,640 ft

COMMUNICATIONS SPECIFICATIONS	
Communication protocol	Modbus RTU
Communication speed	9600/19200bps
Stop bit	1/2 bit
Parity	odd/even/none
Data length	8 bit
Modbus address range	1 to 15

FUNCTIONS

Monitor

On/Off	On/Off status of indoor units
Operation mode	Cool, Heat, Fan, Dry, Auto
Setpoint	Setpoint for indoor units
Room temperature	Return air temperature at indoor unit or remote controller
Louver direction	Swing, louver position (depend on indoor unit model)
Fan speed	L, M, H (depend on indoor unit model)
Forced off status	Forced off status of indoor units
Error	Malfunction, Warning with Error code
Filter sign	Filter sign indicator of indoor units
Communication status	Communication normal/error of indoor units

Control

On/Off	On/Off status of indoor units
Operation mode	Cool, Heat, Fan, Dry, Auto
Setpoint	Setpoint for indoor units
Louver direction	Swing, Stop, louver position (depend on indoor unit model)
Fan speed	L, M, H (depend on indoor unit model)
Filter sign reset	Reset filter sign indicator of indoor units

Retrieve System Information

Connected indoor units	DIII-NET address of connected indoor units can be retrieved.
Indoor unit capabilities	Indoor unit capabilities such as operation mode, fan control, setpoint can be retrieved

OPERATING CONDITIONS	
Power supply	16VDC (+10, -5%)
Operating temperature limit	-4° to 149° F
Operating humidity limit	0 to 95% non-condensing
Storage temperature range	-13° to 167° F
Mass	Approximately 0.18 lbs.
Dimensions	3.94" x 3.94"

Modbus is a registered trademark of Schneider Electronic S. A.

Find out more about DIII-NET/Modbus Adapter, visit www.daikincity.com or www.daikinac.com