TURNTIDE FOR BUILDINGS DATA SHEET

Turntide VRF Adapter

As the perfect companion to Daikin VRV, the Turntide VRF Adapter enables building managers to get the most out of their VRV system.

Unlike most VRV controller solutions available today, the Turntide VRF Adapter puts data and insights from a VRV system at your fingertips with the Turntide App, unlocking the ability to generate advanced reports, improved service workflows, and system data anytime, anywhere.

Specifications

Model	RT-500BP
Description	Turntide VRF Adapter
Max Indoor Units per Adapter	128 (64 Group Addresses)
Power Supply	USB Powered
Power Consumption	0.5 amps
Operating Temp Range	14-140 °F
Operating Humidity Range	0-95% (w/o condensation)
Dimensions (W x H x D)	4.13 x 3.54 x 1.00 in
Mounting	DIN Rail
USB Port - USB 2.0	1
DIII-Net Systems	1
D-Net Cable	16-18 AWG, 2-conductor, stranded, non-shielded cable
Max Cable Length	2000m (6560 ft)

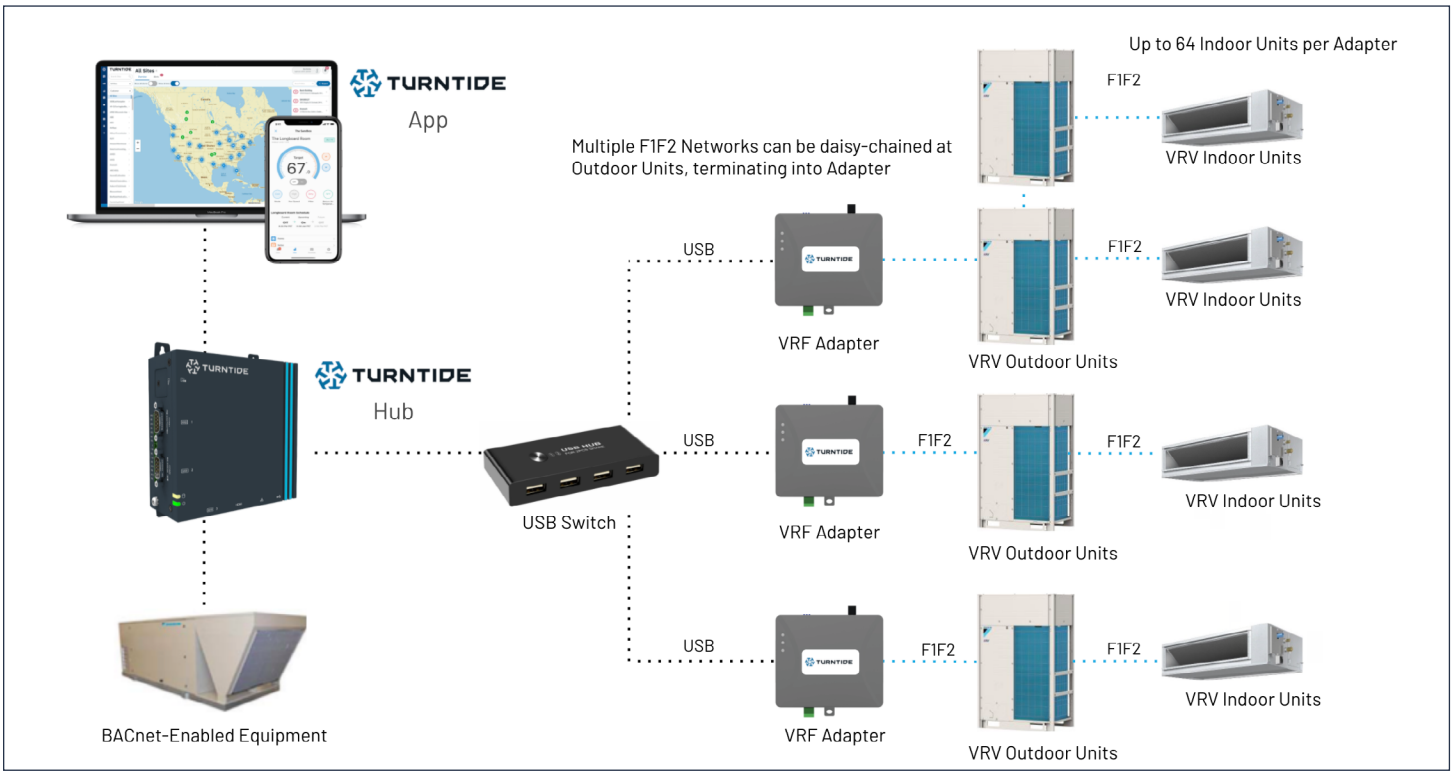
Model Compatibility

- Compatible with VRV III, VRV IV & VRV-X Outdoor Unit Models and all associated VRV Indoor Models.
- Compatible with FTXS, CTXS, CTXG, FTXG, FDXS, CDXS, FVXS with the use of the DIII-Net Adapter KRP928BB2S.

Features

- VRF Adapter can manage one D-III Network, up to 64 Indoor Units per network
- Multiple VRF Adapters can be used to manage more than 64 units
- Connect up to 7 VRF Adapters to one Turntide Hub with Turntide's USB expander
- VRF Adapter connects to Turntide Hub using USB 2.0 connection

Turntide VRF Architecture



Indoor Unit Points

Point Name	
Malfunction Code	Set Temperature
Return Air Temperature	Swing
Liquid Pipe Temperature	Mode
Gas Pipe Temperature	On-Off
EEV Opening	Reset Filter Indicator
Room Temperature	RC On/Off Lockout
Filter	RC Operation Mode Lockout
Fan Speed	RC Setpoint Lockout
RC - Lock All	

Outdoor Unit Points

	Outdoor Unit Type			
VRV Point	VRV-3S	VRV-3R	VRV-4R	VRV-X
4 Way Valve Heat Status				X
4 Way Valve Under Heat Exchanger			X	
4 Way Valve Upper Heat Exchanger			X	
Accumulator Inlet Temperature				X
Accumulator Oil Return Status				X
Airnet Address	X	X	X	X
Ambient Temperature	X	X	X	X
Back Up Operation Status	X	X	X	X
Coil Temperature	X			
Compressor 1 Current			X	X
Compressor 1 Discharge Step Down Status			X	X
Compressor 1 Discharge Temperature			X	X
Compressor 1 Inverter Status	X	X	X	X
Compressor 1 Overcurrent Step Down Status			X	X
Compressor 1 Step Down Discharge Temperature	X	X		
Compressor 2 Current			X	X
Compressor 2 Discharge Step Down Status			X	X
Compressor 2 Discharge Temperature			X	X
Compressor 2 Inverter Status			X	X
Compressor 2 Overcurrent Step Down Status			X	X
Compressor 2 Step Down Discharge Temperature	X	X		
Compressor 2 Step Down Status	X	X		
Compressor 3 Step Down Status	X	X		
Compressor Suction Pipe Temperature			X	
Compressor Surface Temperature			X	X
Condensing Temperature	X	X	X	X
Cool Heat Parallel Status		X	X	
Cooling Status	X	X	X	X
Crank Case Heater 1 Status	X	X		
Crank Case Heater 2 Status	X	X		
Crank Case Heater 3 Status	X	X		
Crankcase Heater 1 Status			X	X
Crankcase Heater 2 Status			X	X
CT1 Step Down Current	X	X		
CT2 Step Down Current	X	X		
Defrost Status	X	X	X	X

Outdoor Unit Points (Continued)

	Outdoor Unit Type			
VRV Point	VRV-3S	VRV-3R	VRV-4R	VRV-X
Demand State		X	X	
Demand Step Down Status	X	X	X	X
Discharge Pipe Retry Status	X	X	X	X
Discharge Temperature Step Down 1 Status	X	X		
Discharge Temperature Step Down 2 Status	X	X		
Drain Pan Heater Status			X	X
Energy Cut Output Status	X	X	X	X
Error Code	X	X	X	X
Error State	X	X	X	X
EV Bypass Status		X		
EV Liquid Temperature		X		
EV Opening		X		
EV1 Opening	X	X	X	X
EV2 Opening	X	X	X	X
EV3 Opening			X	X
EV4 Opening			X	
EV5 Opening			X	
EV6 Opening			X	
Evaporation Temperature	X	X	X	X
Fan 1 Rotation Amount			X	X
Fan 2 Rotation Amount			X	X
Fan Step	X	X	X	X
Four Way Valve 2 Status		X		
Four Way Valve Status	X	X	X	X
Heat Exchanger Gas Pipe Temperature Lower			X	
Heat Exchanger Gas Pipe Temperature Upper			X	
Heat Exchanger Gas Temperature		X		
Heat Exchanger Liquid Pipe Temperature Lower			X	
Heat Exchanger Liquid Pipe Temperature Upper			X	
Heat Exchanger Liquid Temperature		X	X	X
Heat Exchanger Temperature		X	X	X
Heating Status	X	X	X	X
High Pressure Retry Status	X	X	X	X
High Pressure Step Down Status	X	X	X	X
Horsepower	X	X	X	X
Hot Gas Bypass Valve Status	X	X		
Injection Status	X			

Outdoor Unit Points (Continued)

	Outdoor Unit Type			
VRV Point	VRV-3S	VRV-3R	VRV-4R	VRV-X
Inverter 1 Fin Step Down Status			X	X
Inverter 1 Fin Temperature			X	X
Inverter 1 Rotation Amount			X	X
Inverter 1 Standby Status			X	X
Inverter 2 Fin Step Down Status			X	X
Inverter 2 Fin Temperature			X	X
Inverter 2 Rotation Amount			X	X
Inverter 2 Standby Status			X	X
Inverter Current	X	X		
Inverter Discharge Step Down Status	X	X		
Inverter Discharge Temperature	X	X		
Inverter Fan Current	X	X	X	X
Inverter Fin Step Down Status	X	X		
Inverter Overcurrent Step Down Status	X	X		
Inverter Retry Status	X	X		
Inverter Rotation Speed	X	X		
Inverter Temperature	X	X		
Low Pressure Retry Status	X	X	X	X
Low Pressure Step Down Status	X	X	X	X
Module Type	X	X	X	X
Module Unit ID	X	X	X	X
Multi-Oil Status	X			
Oil Return 1 Status			X	X
Oil Return 2 Status			X	X
Oil Return Status	X	X	X	X
Operation Control Mode			X	X
Operation Output		X		
Outdoor Serial Number	X	X	X	X
Outdoor System Type	X	X		
Overcurrent Step Down 1 Status	X	X		
Overcurrent Step Down 2 Status	X	X		
Overheating Standby Status			X	X
Receiver Entrance Temperature	X			
Receiver Gas Purge Temperature			X	
Receiver Inlet Temperature			X	
Receiver Liquid Temperature	X			
Refrigeration Discharge Status		X		

Outdoor Unit Points (Continued)

	Outdoor Unit Type			
VRV Point	VRV-3S	VRV-3R	VRV-4R	VRV-X
Refrigeration Discharging Status		X		
Refrigeration Gas Purge Status		X		
Refrigeration Liquid Status		X		
Restart Standby Status	X	X	X	X
Soft Start Status	X	X		
Solenoid Valve			X	
Startup Control Status			X	X
Sub-cooling Heat Exchanger Gas Temperature		X		
Sub-cooling Heat Exchanger Liquid Temperature		X		
Subcooling Coil Exit Temperature	X			
Subcooling Heat Exchanger Gas Temperature			X	X
Subcooling Heat Exchanger Liquid Temperature			X	X
Suction Temperature	X	X	X	
System Current	X	X	X	X
System Horsepower	X	X	X	X
Target Condensing Temperature	X	X	X	X
Target Evaporation Temperature	X	X	X	X
Thermostat On Capacity			X	X
Thermostat ON Status	X	X	X	X
Ventilation Status	X	X	X	X
VRV Type	X	X	X	X