

AZAI6WSPDKC - DKN Plus Interface

Project Name:		
Location:	_ Approval:	
Engineer:	Date:	
Submitted to:	Construction:	
Submitted by:	Unit #:	
Reference:	Drawing #:	

### **MODEL COMPATIBILITY:**

Compatible with the following indoor units:

Indoor Unit	Model Number	Туре
Family		
VRV and VRV Life	CXTQ, FXAQ, FXDQ, FXEQ, FXFQ, FXHQ, FXLQ, FXMQ, FXNQ, FXSQ, FXTQ, FXUQ, FXZQ	P1P2
SkyAir	FAQ, FBQ, FTQ, FCQ, FHQ	P1P2
Single-Zone and	FDMQ, FFQ	P1P2
Multi-Zone	CDXS, CTXS, FDXS, FTK*, FTKB*, FTX*, FTXB* FTXG, FTXR, FTXS, FVXS	S21

<sup>\*</sup>FTK\_AXVJU, FTKB\_AXVJU, FTX\_AXVJU and FTXB\_AXVJU units are not compatible with the GWY connection; but they can be controlled through BACnet or Modbus.

The following indoor units do not have the S21 connection and require an additional interface adaptor (ordered separately) to provide the S21 connector:

Indoor Unit Models	Required Interface Adaptor
FTX09NMVJU, FTX12NMVJU, FTK09NMVJU, FTK12NMVJU	KRP067A41E
FTX15NMVJU, FTX18NMVJU, FTX24NMVJU, FTK18NMVJU, FTK24NMVJU	KRP980B2E

#### **SPECIFICATIONS:**

#### AZAI6WSPDKC Model Description DKN Plus Interface 1 for each S21/P1P2 indoor unit **Maximum connections** P1P2/S21 communication and 7.7ft / 2.35m (included) power wire Wiring S21 wire adaptor 0.5ft / 0.15m (included) (initial) P1P2 wire adaptor 0.5ft / 0.15m (included) S21 Wire 8.2 ft / 2.5 m (Included) Wiring (revision) P1P2 Wire 8.2 ft / 2.5 m (Included) **Modbus RTU / BACnet MSTP** 9600/19200/38400 bps (Default: 38400) communication baud rate For DKN Plus 12-16VDC from indoor unit PCB Interface Power supply For 3<sup>rd</sup> party 24VAC from external power supply thermostat **Dimensions** 3.62 in x 3.15 in x 1.14 in / 92mm x 80 mm x 29 mm Weight 3.24 oz / 92g -4°F to 158°F Storage temperature **Operation temperature** 32°F to 113°F EMC with the standard 47 CFR Part 15B (US) Compliance EMC with ICES-003 Issue 6 standard (Canada)

#### PRODUCT IMAGE:



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#### **FEATURES:**

- Versatile interface that can integrate with a third-party thermostat through multiple approaches:
  - Cloud API
  - o Modbus
  - BACnet MS/TP
- 3rd party thermostat G/Y/W (Fan/Cool/Heat) relay control through thermostat wiring\*
  - Automatically disables thermostat relay logic when cloud API connection detected
  - Custom control logic applied to minimize the loss of the indoor unit efficiency when no cloud API, BACnet or Modbus connection detected
  - Compatible Daikin thermostats: App Stat 250803400 Value Series (TSTATD1100-2 or TSTATD1152-2) –
    Premium series (D4271C) Premium Mini (D2270C) Color Touch (DT4272C)
- Easy commissioning with Bluetooth configuration App
- Indoor unit control and monitoring points (for integration through cloud, Modbus, and BACnet MS/TP only)
  - o On/Off
  - Setpoint
  - Room temperature
  - Mode (Auto, Cool, Heat, Fan, Dry)
  - o Fan speed
  - Louver position
  - Error code
- Indoor unit force off by interlock control through digital input dry contact (T1T2)
- Controls auxiliary heater with dry contact as a secondary heat source:
  - Turn on and off the auxiliary heater based on the differential (configured in App) between the setpoint and the room temperature.
  - Enable/Disable the auxiliary heater based on outdoor temperature (S21 IDU only)
  - The user can enable the emergency heat mode from the DKN App
    - If the indoor unit has an error, the user can enable the emergency heater from the app.
- Modbus and BACnet MS/TP Integration
  - The following points are available:

No.	Point Name	Read Only/Writable
1	Unit on/off	Writable
2	Setpoint	Writable
3	Room temperature	Writable**
4	Mode Auto/Cool/Heat/Fan/Dry	Writable
5	Fan speed	Writable
6	Louver position	Writable
7	Error code	Read only
8	Digital input status	Read only
9	Aux heat output status	Read only

<sup>\*</sup> Not compatible with FTK\_AXVJU, FTKB\_AXVJU, FTX\_AXVJU and FTXB\_AXVJU units, as the room temperature cannot be read by the DKN Plus Interface

<sup>\*\*</sup> The room temperature is writable for P1P2 indoor units only and read only for S21 indoor units.

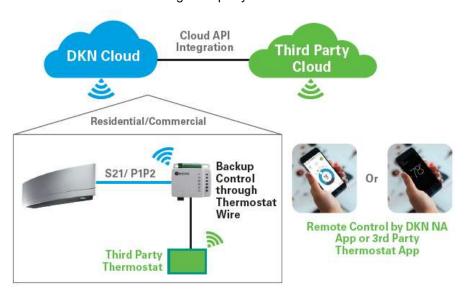


**AZAI6WSPDKC - DKN Plus Interface** 

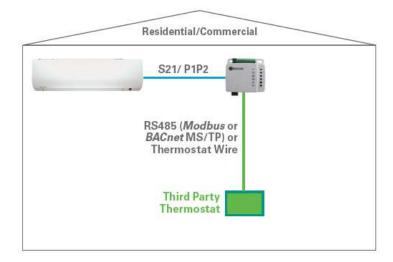
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#### **SYSTEM DIAGRAM:**

- Integration with 3<sup>rd</sup> party thermostat
  - Integration with Smart Thermostats through 3rd party Cloud API



Integration through RS485 or Thermostat Wire

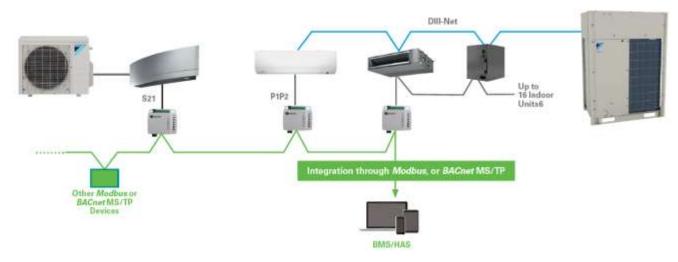




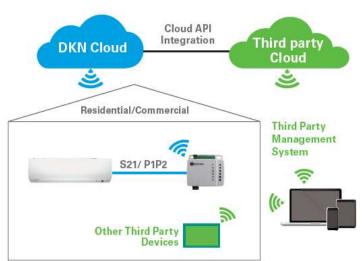
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- Integration with Building Management System (BMS) or Home Automation System (HAS)
  - Integration through Modbus or BACnet MS/TP



Integration through Cloud API



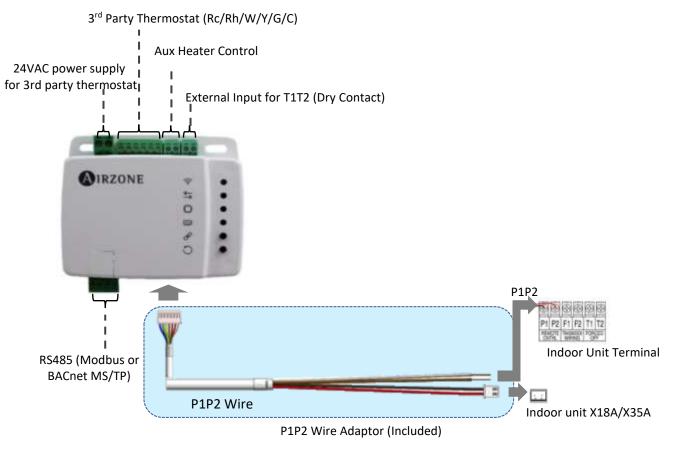


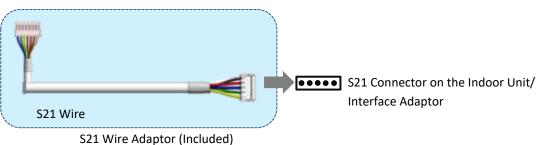
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### **WIRING DIAGRAM:**

Connects to P1P2 indoor unit





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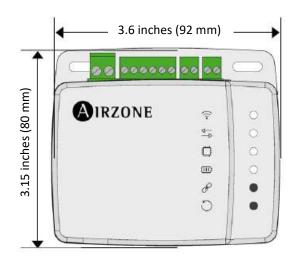
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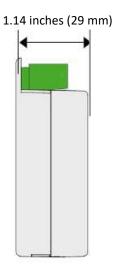


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### **DIMENSIONS:**





### **DOCUMENTATION:**

Documentation available on www.daikincity.com and/or www.daikinac.com:

- Submittal
- Installation Manual
- Product Flyer
- Written Guide Specs