



Product Bulletin

Date	Subject	Department
7/11/2023	Toshiba Carrier BACNet Controller – U-Series	Product Marketing
Bulletin Number	Product Model Number(s)	Author Name/Email
VRF-23-003	BMS-IFBN1281U-UL	Tyler Oehlman Tyler.Oehlman@carrier.com

Toshiba Carrier BACNet Controller – U-Series

As part of the Toshiba Carrier U-Series VRF product launch, we are introducing a new BACNet controller with the protocol to not only communicate with the new U-Series equipment, but as well as the previous E-Series equipment. In addition to being compatible with both the E-Series and U-Series VRF equipment, the number of connectable units has increased from 64 to 128.

Note:

When connecting the BMS-IFBN1281U-UL to a E-Series TCC communication bus the available number of connected indoor units is 64.

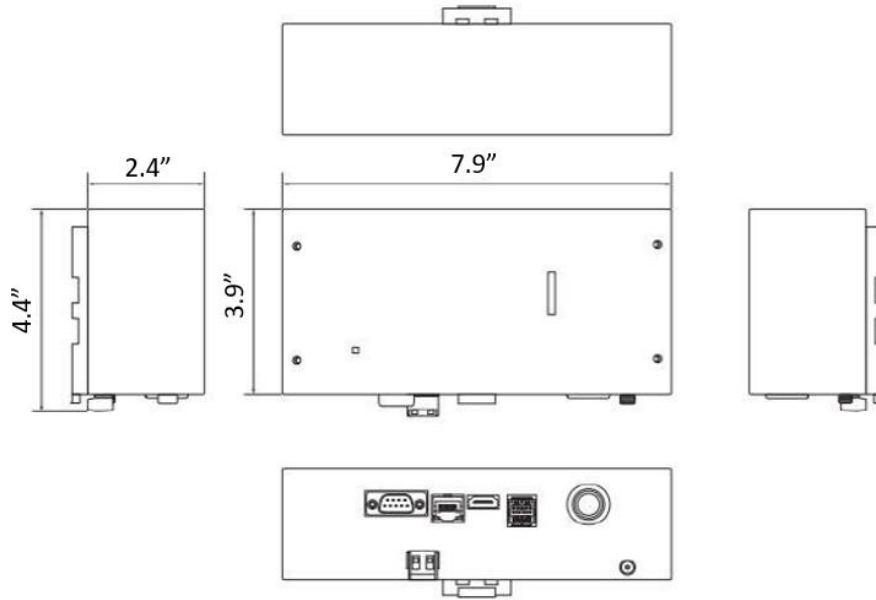
When connecting the BMS-IFBN1281U-UL to a U-Series TU2C communication bus the available number of connected indoor units is 128.

Please stay tuned for additional details

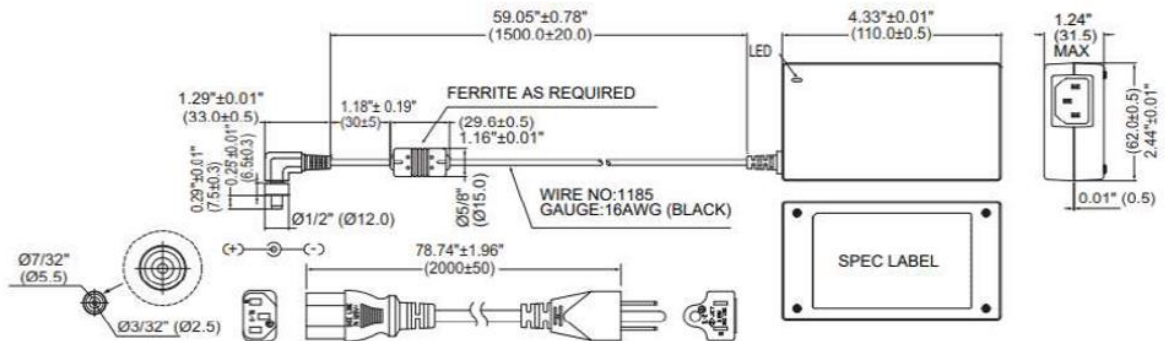
	Phasing Out	Phasing In
Model number	BMS-IFBN640TLUL	BMS-IFBN1281U-UL
Image		
Protocol	E-Series Protocol	New U-Series Protocol
No. of Connectable Indoor Units	64	128 (U-Series) 64 (E-Series)
Dimensions (W x H x D)	5.5" x 3.5" x 1.8"	7.9" x 3.9" x 2.4"
Weight (lbs)	0.57	1.6
Voltage	120 V AC 60 Hz	120 V AC 60 Hz
Power consumption	3 W	10 W
ETL Cert	Y	Y



Product Bulletin



(Power adapter)





Product Bulletin

Object List

Object Name		Object Type	Object Type (10bit)	Equipment category (5Bit)	Equipment Number (1Byte)	Instance Number (1Byte)	Object ID (4Byte)	Value
Gateway Device		Device Object(8)	8	00000	0	IP address	0x020****	
ON/OFF Status	Monitor	Binary Input Object(3)	3	00000	FCU(n) 1-128	0x02	0x00C0xx02	Start/Stop
	Control	Binary Output Object(4)	4	00000	FCU(n) 1-128	0x82	0x0100xx82	Start/Stop
Operation Mode	Monitor	Multi-state Input Object(13)	13	00000	FCU(n) 1-128	0x03	0x0340xx03	Heat/Cool/Fan/Dry/Auto
	Control	Multi-state Output Object(14)	14	00000	FCU(n) 1-128	0x83	0x0380xx83	Heat/Cool/Fan/Dry/Auto
Fan Speed	Monitor	Multi-state Input Object(13)	13	00000	FCU(n) 1-128	0x05	0x0340xx05	Auto / HH / H / L / LL / H+ / L+
	Control	Multi-state Output Object(14)	14	00000	FCU(n) 1-128	0x85	0x0380xx85	Auto / HH / H / L / LL / H+ / L+
Set Temperature *1	Monitor	Analog Input Object(0)	0	00000	FCU(n) 1-128	0x04	0x0000xx04	Standard FCU From 18.0 to 29.0 (°C) From 64.0 to 84.0 (°F) Fresh Air Intake Indoor From 16.0 to 27.0 (°C) From 60.0 to 80.0 (°F)
	Control	Analog Output Object(1)	1	00000	FCU(n) 1-128	0x84	0x0040xx84	Standard FCU From 18.0 to 29.0 (°C) From 64.0 to 84.0 (°F) Fresh Air Intake Indoor From 16.0 to 27.0 (°C) From 60.0 to 80.0 (°F)
Room Temperature		Analog Input Object(0)	0	00000	FCU(n) 1-128	0x08	0x0000xx08	From -39.0 to 150.0 (°C) From -38.2 to 302.0 (°F)
Permit / Prohibit of Local	Monitor	Multi-state Input Object(13)	13	00000	FCU(n) 1-128	0x09	0x0340xx09	- Start/Stop - Operation Mode - Temperature Setting
	Control	Multi-state Output Object(14)	14	00000	FCU(n) 1-128	0x89	0x0100xx89	- Start/Stop - Operation Mode - Temperature Setting
Filter Sign	Monitor	Binary Input Object(3)	3	00000	FCU(n) 1-128	0x14	0x00C0xx14	Normal / Filter Sign
	Control	Binary Output Object(4)	4	00000	FCU(n) 1-128	0x95	0x0100xx95	- / Filter Sign Reset
Alarm status		Binary Input Object(3)	3	00000	FCU(n) 1-128	0x40	0x00C0xx40	Alarm / No Alarm
Check Code		Multi-state Input Object(13)	13	00000	FCU(n) 1-128	0x01	0x0340xx01	No Check Code / Check Code
Louver	Monitor	Multi-state Input Object(13)	13	00000	FCU(n) 1-128	0x07	0x0340xx07	Swing / F1 / F2 / F3 / F4 / F5 / Stop
	Control	Multi-state Output Object(14)	14	00000	FCU(n) 1-128	0x87	0x0380xx87	Swing / F1 / F2 / F3 / F4 / F5 / Stop
Ventilation ON/OFF Status (option)	Monitor	Binary Input Object(3)	3	00000	FCU(n) 1-128	0x28	0x00C0xx28	Start/Stop
	Control	Binary Output Object(4)	4	00000	FCU(n) 1-128	0xA8	0x0100xxA8	Start/Stop
Ventilation Mode (option)	Monitor	Multi-state Input Object(13)	13	00000	FCU(n) 1-128	0x29	0x0340xx29	Bypass Mode / Heat Exchange Mode / Automatic Mode / 24-hours / Nighttime Heat purge
	Control	Multi-state Output Object(14)	14	00000	FCU(n) 1-128	0xA9	0x0380xxA9	Bypass Mode / Heat Exchange Mode / Automatic Mode
Ventilation Fan Speed (option)	Monitor	Multi-state Input Object(13)	13	00000	FCU(n) 1-128	0x4C	0x0340xx4C	H / M / Unbalanced (Only models with Unbalanced enabled)
	Control	Multi-state Output Object(14)	14	00000	FCU(n) 1-128	0xCC	0x0380xxCC	H / M / Unbalanced (Only models with Unbalanced enabled)
Indoor thermo status		Binary Input Object(3)	3	00000	FCU(n) 1-128	0x54	0x00C0xx54	Thermo ON / Thermo OFF
Save operation rate (option)	Monitor	Multi-state Input Object(13)	13	00000	FCU(n) 1-128	0x55	0x0340xx55	No Save (100% operation) / XX% Save (100-50%) / 50% Save (50%) / 100% Save (Forcibly Thermo OFF)
	Control	Multi-state Output Object(14)	14	00000	FCU(n) 1-128	0xD5	0x0380xxD5	No Save (100% operation) / XX% Save (100-50%) / 50% Save (50%) / 100% Save (Forcibly Thermo OFF)
Indoor Communication Failure		Binary Input Object(3)	3	00000	FCU(n) 1-128	0x41	0x00C0xx41	Normal / Alarm
Facility request		Multi-state Input Object(13)	13	00000	FCU(n) 1-128	0x0A	0x0340xx0A	1(Thermo off)~16



Product Bulletin

The u-Series BACnet interface is currently available for sale, with documentation available in HVAC Partners. We anticipate the BACnet interface to be loaded in the VRoom software, early Q3 2022.

For questions contact your regional VRF Sales Manager. For additional product information please visit HVAC Partners or email VRFApplications@carrier.com.