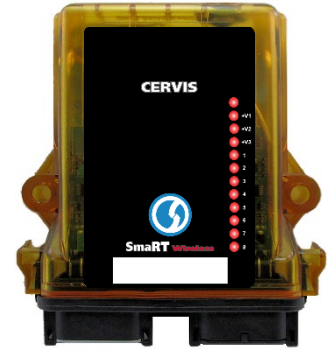


BU-9H16AF Base Unit BU-2H16AF Base Unit

Features

- ✓ DSSS Technology (900 MHz @ 10 mW, 2.4 GHz @ 100 mW)
- ✓ Eight FET Outputs/Inputs
- ✓ Eight Analog Inputs (0–12 VDC or 4–20 mA)
- ✓ Dual Connectors for Ease of Wiring
- ✓ Translucent Case (reduced hole drilling)
- ✓ Diagnostic Output LEDs
- ✓ Weatherproof
- ✓ CAN Bus Capable
- ✓ Compact Design



The versatile BU-9H16AF and BU-2H16AF base units feature eight FET (field effect transistor) high-side switching outputs or switch-to-ground digital inputs, eight 0–12 VDC or 4–20 mA analog inputs/outputs (I/O), and control area network (CAN) Bus control capability. Cervis, Inc. can customize the versatile, programmable digital and analog outputs/inputs to fit specific user applications.

The BU-9H16AF and BU-2H16AF accept a broad range of input power, with operating voltages ranging from +10 VDC to +28 VDC. The rugged weatherproof enclosure allows the units to operate worry free in harsh weather conditions. Two 12-wire color-keyed weatherproof connecting cables connect the controlled devices.

Using Direct Sequence Spread Spectrum (DSSS) wireless technology at 900 MHz or 2.4 GHz, the base unit provides a robust link with a SmaRT Hand-Held Remote in congested radio environments. SmaRT base units feature seamless association to SmaRT handheld remotes without the need to open either the handheld remote or the base unit case.

Specifications

Power

Operating V_{in}	+10 to +28 VDC
Safe Power	+6.5 to +32 VDC

Environment

Operating Temp	–20° C to 55° C (–4° F to 131° F)
Storage Temp	–40° C to 85° C (–40° F to 185° F)
Humidity	0 to 100%

Enclosure

Dimensions	119 mm x 133 mm x 36 mm (5.24" x 4.69" x 1.42")
Durability	High Impact Polymer
Mounting	7.4 mm (0.29") dia. holes 102 mm center-to-center (4" center-to-center)

Outputs/Inputs

Eight Digital	FET –Open Drain; factory configurable Input/Output
Eight Analog	0–12 V or 4–20 mA; factory configurable Input/Output
Current	2 A Per channel 15 A Max. @ 55° C

Red LED Indicators

Unmarked	ON	– polarity reversed
+V1, +V2, +V3	ON	– OK
1	Health	– blinks when active
2	RF TX	– flashes when active
3	RF RX	– flashes when active
4	CAN TX	– flashes when active
5	CAN RX	– flashes when active
6	Output	– blinks when active
7	Input	– blinks when active
8	Error	– solid when active

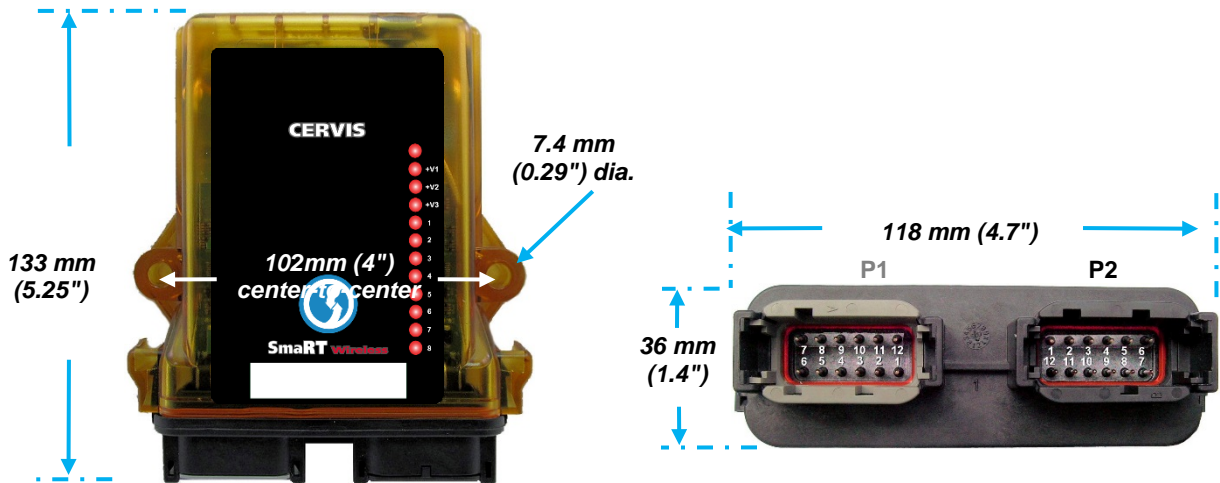
Radio

	BU-9H16AF	BU-2H16AF
Frequency	906–924 MHz	2405–2580 MHz
Power	10 mW	100 mW
License	License-Free	
Modulation	DSSS	
Antenna	Internal or External (RP-TNC)	

Umbilical Communications (option)

CAN Bus	SAE J1939
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Mounting Dimensions/P1 and P2 Pinout and Wiring



SmaRT BU-xH16AF Pinout

P1 Pin	Assignment	P1 Pin	Assignment
P1:1	+VDC	P1:7	AIO 1
P1:2	+VDC	P1:8	AIO 3
P1:3	DIO 6	P1:9	DIO 7
P1:4	DIO 8	P1:10	DIO 5
P1:5	AIO 4	P1:11	-VDC
P1:6	AIO 2	P1:12	-VDC

P2 Pin	Assignment	P2 Pin	Assignment
P2:1	+VDC	P2:7	CANL
P2:2	DIO 4	P2:8	AIO 8
P2:3	DIO 2	P2:9	AIO 6
P2:4	AIO 5	P2:10	DIO 1
P2:5	AIO 7	P2:11	DIO 3
P2:6	CANH	P2:12	-VDC

SmaRT BU-xH16AF Options

Name	Freq.	RF Power	Input Power	Serial Port	Digital Channels	Analog Channels	Antenna
BU-2H16AF-INT-8F-8V-CN	2.4 GHz	100 mW	7-28 VDC	CAN	8 FET	(8) 0-10 V OUT	Internal
BU-2H16AF-EXT-8F-8V-CN	2.4 GHz	100 mW	7-28 VDC	CAN	8 FET	(8) 0-10 V OUT	External
BU-2H16AF-INT-8F-8A-CN	2.4 GHz	100 mW	7-28 VDC	CAN	8 FET	(8) 4-20 mA OUT	Internal
BU-2H16AF-EXT-8F-8A-CN	2.4 GHz	100 mW	7-28 VDC	CAN	8 FET	(8) 4-20 mA OUT	External
BU-9H16AF-INT-8F-8V-CN	900 MHz	10 mW	7-28 VDC	CAN	8 FET	(8) 0-10 V OUT	Internal
BU-9H16AF-EXT-8F-8V-CN	900 MHz	10 mW	7-28 VDC	CAN	8 FET	(8) 0-10 V OUT	External
BU-9H16AF-INT-8F-8A-CN	900 MHz	10 mW	7-28 VDC	CAN	8 FET	(8) 4-20 mA OUT	Internal
BU-9H16AF-EXT-8F-8A-CN	900 MHz	10 mW	7-28 VDC	CAN	8 FET	(8) 4-20 mA OUT	External

✓ **Note:** BU-xH16AF-CAN units are internally terminated at 3.3kΩ. Termination can be removed at the factory.