

BU-9H20XF Base Unit, BU-2H20XF Base Unit

Features

- ✓ DSSS Technology (900 MHz @ 10 mW, 2.4 GHz @ 100 mW)
- ✓ 20 Dedicated FET Outputs/Inputs
- ✓ Current Sense Capable
- ✓ Four Character Display Option
- ✓ PWM Control
- ✓ Dual Connectors for Ease of Wiring
- ✓ Translucent Case (reduced hole drilling)
- ✓ Weatherproof
- ✓ CAN Bus Capable
- ✓ 11 Diagnostic LEDs
- ✓ Power Cutoff FET
- ✓ Compact Design
- ✓ Dual Analog Input Capable



The versatile BU-9H20XF and BU-2H20XF base units feature twenty FET (field effect transistor) high-side switching outputs or switch-to-power digital inputs, and CAN Bus control capability. Ten channels are equipped with current sense for added control capability.

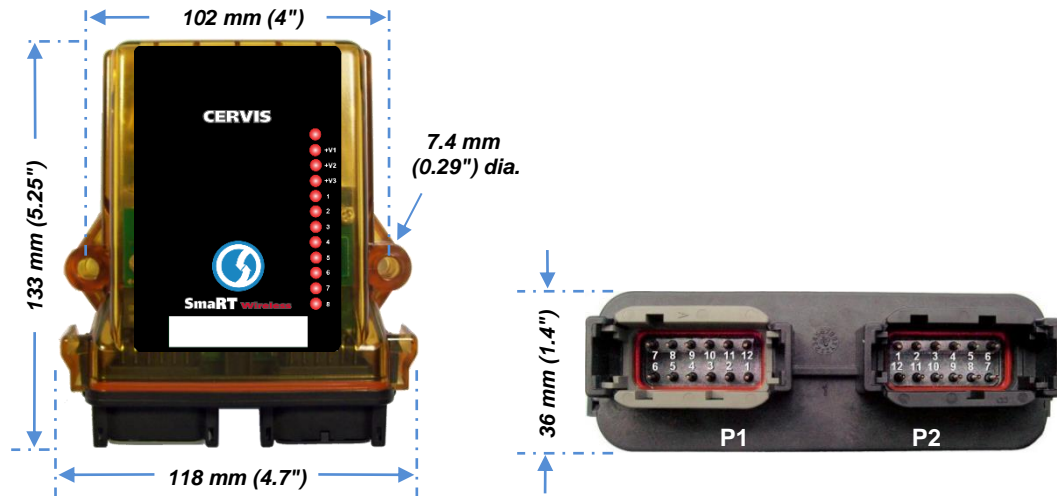
The BU-9H20XF and BU-2H20XF accept a broad range of input power with operating voltages ranging from 7 VDC to 28 VDC. The rugged weatherproof enclosure allows these unit to operate worry free in harsh weather conditions. Two 12-wire color-keyed weatherproof connecting cables connect the controlled devices.

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 handheld remote in congested radio environments. SmaRT base units feature seamless association to SmaRT hand-held remotes without the need to open either the handheld remote or base unit.

Specifications

Power		Indicators (red LEDs)	
Operating V_{in}	+7 to +28 VDC	Unmarked	Unused
Environment		+V1, +V2, +V3	Voltages OK when lit
Operating Temp	-20° C to 55° C (-4° F to 131° F)	1	Health – blinks 1x/sec when active
Storage Temp	-40° C to 85° C (-40° F to 185° F)	2	RF TX – flashes when active
Humidity	0 to 100%	3	RF RX – flashes when active
Enclosure		4	CAN TX – flashes when active
Dimensions	119 mm x 133 mm x 36 mm (5.24" x 4.69" x 1.42")	5	CAN RX – flashes when active
Durability	High Impact Polymer	6	Output – blinks 1x/sec when active
Mounting	7.4 mm (0.29") dia. holes 102 mm (4") center-to-center	7	Input – blinks 1x/sec when active
Outputs/Inputs		8	Error – solid – channel output low or high current
Twenty Digital	FET –Open Drain; factory configurable Input/Output	Radio	BU-9H20XF BU-2H20XF
Current	2 A Per channel 8 A Max. @ 55° C	Frequency	906–924 MHz 2405–2580 MHz
		Power	10 mW 100 mW
		License	License-Free
		Modulation	DSSS
		Antenna	Internal or External (RP – TNC)
		Serial Communications (option)	
		CAN Bus	SAE J1939

Base Unit Dimensions and Wiring



BU-9H20XF and BU-2H20XF Wiring Table

Pin	Name	Pin	Name
P1:1	M17	P2:1	M5
P1:2	M18	P2:2	M6
P1:3	-VDC Umbilical Com	P2:3	M7
P1:4	M11	P2:4	M8
P1:5	M12	P2:5	M19
P1:6	+VDC	P2:6	M20
P1:7	M13	P2:7	CANH
P1:8	M14	P2:8	CANL
P1:9	M15	P2:9	M1
P1:10	M16	P2:10	M2
P1:11	M10	P2:11	M3
P1:12	M9	P2:12	M4

BU-9H20XF and BU-2H20XF Model Specifications

Model	Freq.	RF Pwr	#Ch	Channel Type	Antenna Style	Input Voltage
BU-2H20XF-EXT-AV2-CAN	2.4 GHz	100 mW	20	FET	External	7-28 VDC
BU-2H20XF-INT-AV2-CAN	2.4 GHz	100 mW	20	FET	Internal	7-28 VDC
BU-2H20XF-EXT-AVI-CAN	2.4 GHz	100 mW	20	FET	External	7-28 VDC
BU-2H20XF-INT-AVI-CAN	2.4 GHz	100 mW	20	FET	Internal	7-28 VDC
BU-9H20XF-EXT-AV2-CAN	900 MHz	10 mW	20	FET	External	7-28 VDC
BU-9H20XF-INT-AV2-CAN	900 MHz	10 mW	20	FET	Internal	7-28 VDC
BU-9H20XF-EXT-DIS-AV2-CAN	2.4 GHz	10 mW	20	FET	External	7-28 VDC
BU-9H20XF-INT-DIS-AV2-CAN	2.4 GHz	10 mW	20	FET	Internal	7-28 VDC

✓ **Note:** BU-xH20XF-CAN units are internally terminated at 1.2 kΩ. Termination can be removed at the factory.