SmaRT BU-xH24XF Base Unit

Features

- ✓ DSSS Technology (900MHz @ 10mW , 2.4GHz @ 100mW)
- ✓ Sixteen FET Outputs/Inputs
- ✓ Eight Current Sense Channels
- ✓ H-Bridge
- ✓ Power Cutoff FET
- ✓ Two Form C Relays
- ✓ Weatherproof
- ✓ CAN Bus Capable
- ✓ Five Diagnostic LEDs
- ✓ Two Analog Outputs
- ✓ Four Analog Inputs
- ✓ Quad Connectors for Ease of Wiring with Power on Each Connector

The versatile BU-xH24XF base units feature an H-Bridge, sixteen FET (field effect transistor) high-side switching outputs or switch-to-ground digital inputs, two Form C relays, and CAN Bus control capability.

The BU-xH24XF accepts a broad range of input power with operating voltages ranging from 7VDC to 28VDC. The rugged weatherproof enclosure allows these units to operate worry free in harsh weather conditions. Four 12-wire color-keyed weatherproof connecting cables connect the controlled devices.

Using Direct Sequence Spread Spectrum (DSSS) wireless technology at 900MHz or 2.4GHz, 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

Operating V_{in}	+7 to +28VDC

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 (Internal Antenna)

Dimensions	163.20 x 204.71 x 53mm 6.25” x 8.06” x 2.09”
Durability	High Impact Polymer
Mounting Holes	7.4mm (0.29”) dia. Holes
(2-Sets of Two)	143mm (5.63) center-to-center

Outputs/Inputs

H-Bridge	One @ 2A continuous
FET (16)	Sixteen open drain — 15A total eight @ 4A/channel eight @ 2A/channel
Form C Relay	Two @ 8A Per channel
Four Analog In	0–10V input/4-20mA input (M21 – M24)
Two Analog Out	0-10V output (M19 and M20)

Radio	**BU-9H24XF**	**BU-2H24XF**
Frequency	906-924MHz	2405-2580MHz
Power	10mW	100mW
License	License Free	
Modulation	DSSS	
Antenna	Internal or External (RP – TNC)	

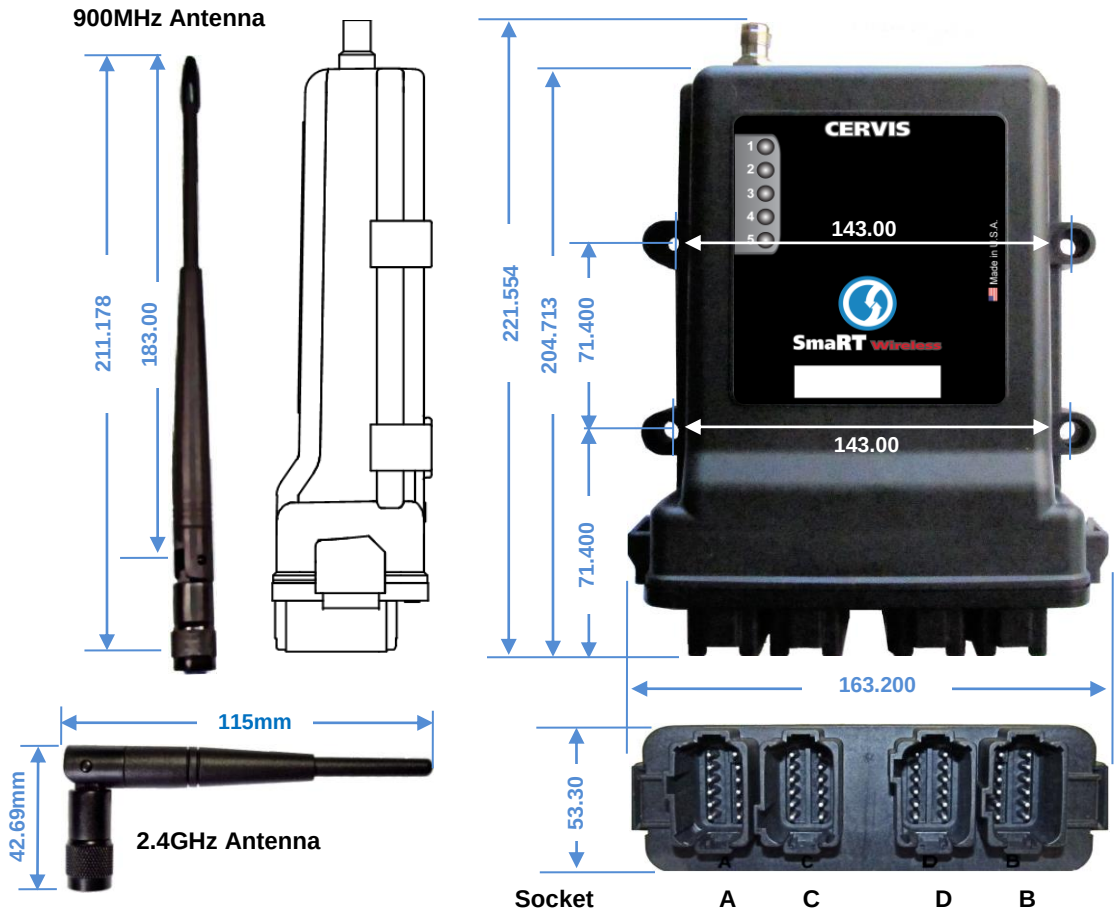
Serial Communications (option)

CAN Bus	SAE J1939

LED Indicators

1 (Power)	OK when amber
2 (Out/In)	Green – output(s) only active Red – input(s) only active Amber – output(s) and input(s) active
3 (Health)	Green when health OK
4 (RF TX/RX)	Red – TX only active Green – RX only active Amber – TX/RX active
5 (CAN TX/RX)	Red – TX only active Green – RX only active Amber– TX/RX active

Base Unit Dimensions and Wiring (measurements in millimeters)



BU-xH24XF Wiring Table

Socket	Pins 1 through 12 Assignments					
A	1: M1	2: M2	3: M3	4: M4	5: M5	6: M6
	7: M7	8: M8	9: +VIN	10: +VIN	11: GND	12: GND
C	1: M9	2: M10	3: M11	4: M12	5: M13	6: M14
	7: M15	8: M16	9: +VIN	10: +VIN	11: GND	12: GND
D	1: M17 NC	2: M17 COM	3: M17 NO	4: M18 NC	5: M18 COM	6: M18 NO
	7: M19	8: M20	9: +VIN	10: +VIN	11: GND	12: GND
B	1: CANH	2: CANL	3: CANTERM	4: RS232TX	5: RS232RX	6: M21
	7: M22	8: M23	9: M24	10: +VIN	11: GND	12: GND

BU-xH24XF Model Specifications

Model	Freq.	RF Pwr	#Ch	Channel Types	Antenna	Input V
BU-9H24XF-INT-AV4-AO2	900MHz	10mW	24	H-Bridge, FET, Digital In, Form C Relay	Internal	7 – 28VDC
BU-9H24XF-EXT-AV4-AO2	900MHz	10mW	24	H-Bridge, FET, Digital In, Form C Relay	External	7 – 28VDC
BU-2H24XF-INT-AV4-AO2	2.4GHz	100mW	24	H-Bridge, FET, Digital In, Form C Relay	Internal	7 – 28VDC
BU-2H24XF-EXT-AV4-AO2	2.4GHz	100mW	24	H-Bridge, FET, Digital In, Form C Relay	External	7 – 28VDC

✓ **Note: EBU-xH24XF-CAN units are internally terminated at 1.2kΩ.Termination can be removed at the factory.**