

SmaRT BU-xH6R Base Unit

Features

- ✓ 900 MHz or 2.4 GHz Direct Sequence Spread Spectrum Technology
- ✓ Six Form C Relay Outputs
- ✓ Diagnostic LED outputs
- ✓ Weatherproof compact design
- ✓ Optional external antenna
- ✓ Optional J1939 CAN interface
- ✓ Dual cable connectors

The SmaRT Base Unit BU-xH6R features six Form C relay outputs, each 8A max. The standard BU-xH6R operates using 110/230 volts AC or DC. It is also available for low-voltage DC or AC power input. All connections are made via dual 12-wire cables using uniquely keyed connectors to guard against cross connection. The rugged weatherproof enclosure allows the unit to operate worry free in harsh weather conditions.



SmaRT base units feature seamless association with a SmaRT handheld unit without the need to open the case. Using Channel-Hopping 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.

Specifications

V_{in}

BU-xH6R-INT-HVU	100–240 VAC @ 47–440 Hz or 120–340 VDC
BU-xH6R-EXT-HVU	100–240 VAC @ 47–440 Hz or 120–340 VDC
BU-xH6R-INT-LVD	7–32 VDC
BU-xH6R-EXT-LVD	7–32 VDC
BU-xH6R-INT-LVA	7–28 VAC
BU-xH6R-EXT-LVA	7–28 VAC
Operating Power	5 W max.

Enclosure

Dimensions	mm: 133 x 118 x 36 inch: 5.24 x 4.65 x 1.42
Weight	340 g (0.75 lbs.)
Durability	High Impact Polymer

Outputs

Six	Relay, Form C
Rating per	8 A max. switching @ 250 VAC or VDC 100 mA min. @ 5 VDC
Total	48 A max.

RS-232*

Settings	19,200 bits/sec, N, 8, 1
-----------------	--------------------------

*(Not available with CAN option)

Radio

Frequency	906–924 MHz; 2405–2480 MHz
Radio Frequency (RF) Power	10 mW @ 900 MHz; 100 mW @ 2.4 GHz
License	None required
Modulation	Channel-Hopping DSSS
Antenna	Internal or external

LEDs

CAN TX/RX	Green	–	Receive
	Red	–	Transmit
Out	Green	–	Active Output
Health	Green Pulse/Sec.	–	OK
RF TX/RX	Green	–	Receive
	Red	–	Transmit
Power	Amber	–	OK
	Red/Green	–	Fault

Environment

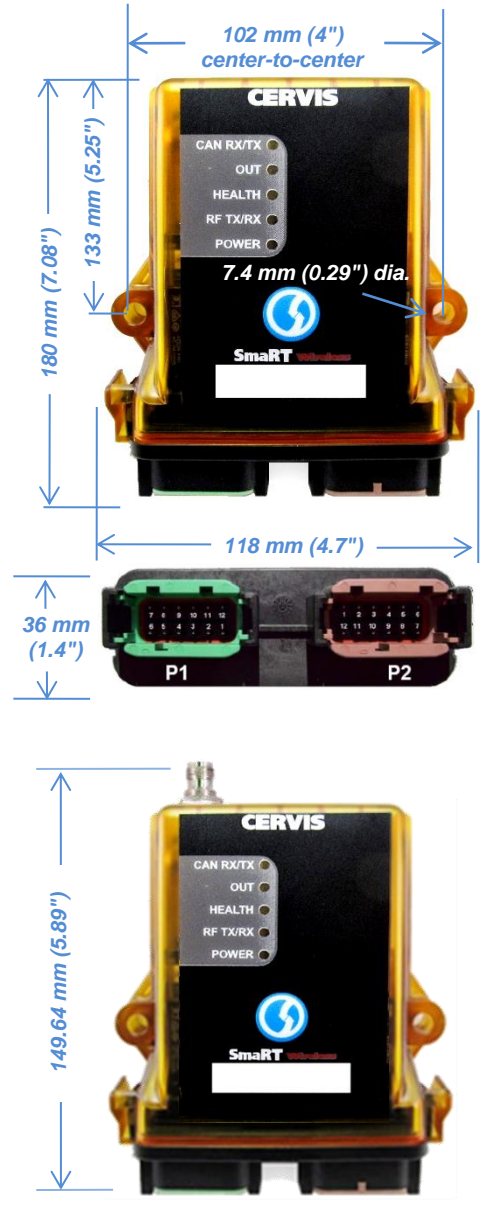
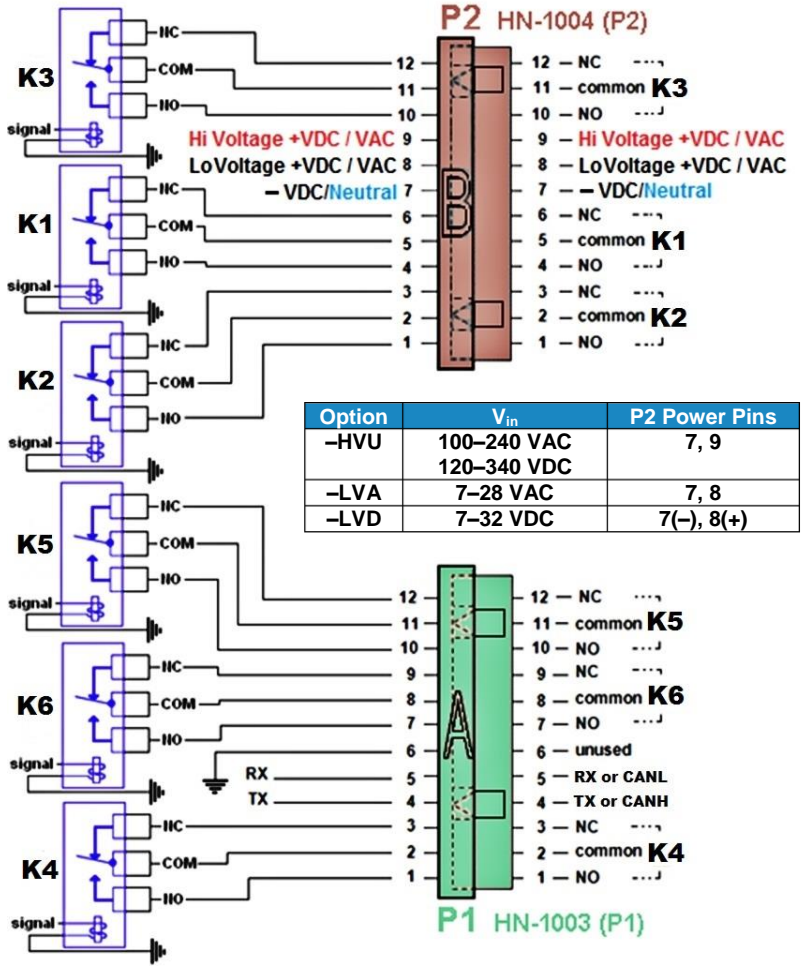
Operating Temp	–25° C to 60° C (–13° F to 140° F)
Storage Temp	–40° C to 85° C (–40° F to 185° F)
Humidity	0 to 100%
Vibration/Shock	IEC60068-2-6 10 Hz to 150 Hz @ 1.0 g peak acceleration 10.0 g peak shock acceleration

CAN Option

Protocol	SAE J1939
-----------------	-----------



Cable Wiring and Connection



BU-xH6R Hardware Options

Model	Freq.	RF Power	Input V	Antenna	Serial Port	Arc Supp.	SmaRT Connect
BU-9H6R-INT-LVD	900 MHz	10 mW	7-32 VDC	Internal	RS-232	Yes	Yes
BU-9H6R-INT-LVD-CAN✓	900 MHz	10 mW	7-32 VDC	Internal	CAN	Yes	Yes
BU-9H6R-INT-LVD-NOS	900 MHz	10 mW	7-32 VDC	Internal	RS-232	No	Yes
BU-9H6R-INT-LVD-NOS-CAN✓	900 MHz	10 mW	7-32 VDC	Internal	CAN	No	No
BU-9H6R-INT-LVA†	900 MHz	10 mW	7-28 VAC	Internal	RS-232	Yes	Yes
BU-9H6R-INT-LVA-CAN✓†	900 MHz	10 mW	7-28 VAC	Internal	CAN	Yes	No
BU-9H6R-INT-LVA-NOS	900 MHz	10 mW	7-28 VAC	Internal	RS-232	No	Yes
BU-9H6R-INT-LVA-NOS-CAN✓	900 MHz	10 mW	7-28 VAC	Internal	CAN	No	No

Model	Freq.	RF Power	Input V	Antenna	Serial Port	Arc Supp.	SmaRT Connect
BU-9H6R-INT-HVU†	900 MHz	10 mW	100–240 VAC	Internal	RS-232	Yes	Yes
BU-9H6R-INT-HVU-CAN✓†	900 MHz	10 mW	100–240 VAC	Internal	CAN	Yes	No
BU-9H6R-INT-HVU-NOS	900 MHz	10 mW	100–240 VAC	Internal	RS-232	No	Yes
BU-9H6R-INT-HVU-NOS-CAN✓	900 MHz	10 mW	100–240 VAC	Internal	CAN	No	No
BU-9H6R-EXT-LVD	900 MHz	10 mW	7–32 VDC	External	RS-232	Yes	Yes
BU-9H6R-EXT-LVD-CAN✓	900 MHz	10 mW	7–32 VDC	External	CAN	Yes	No
BU-9H6R-EXT-LVD-NOS	900 MHz	10 mW	7–32 VDC	External	RS-232	No	Yes
BU-9H6R-EXT-LVD-NOS-CAN✓	900 MHz	10 mW	7–32 VDC	External	CAN	No	No
BU-9H6R-EXT-LVA†	900 MHz	10 mW	7–28 VAC	External	RS-232	Yes	Yes
BU-9H6R-EXT-LVA-CAN✓†	900 MHz	10 mW	7–28 VAC	External	CAN	Yes	No
BU-9H6R-EXT-LVA-NOS	900 MHz	10 mW	7–28 VAC	External	RS-232	No	Yes
BU-9H6R-EXT-LVA-NOS-CAN✓	900 MHz	10 mW	7–28 VAC	External	CAN	No	No
BU-9H6R-EXT-HVU†	900 MHz	10 mW	100–240 VAC	External	RS-232	Yes	Yes
BU-9H6R-EXT-HVU-CAN✓†	900 MHz	10 mW	100–240 VAC	External	CAN	Yes	No
BU-9H6R-EXT-HVU-NOS	900 MHz	10 mW	100–240 VAC	External	RS-232	No	Yes
BU-9H6R-EXT-HVU-NOS-CAN✓	900 MHz	10 mW	100–240 VAC	External	CAN	No	No
BU-2H6R-INT-LVD	2.4 GHz	100 mW	7–32 VDC	Internal	RS-232	Yes	Yes
BU-2H6R-INT-LVD-CAN✓	2.4 GHz	100 mW	7–32 VDC	Internal	CAN	Yes	Yes
BU-2H6R-INT-LVD-NOS	2.4 GHz	100 mW	7–23 VDC	Internal	RS-232	No	Yes
BU-2H6R-INT-LVD-NOS-CAN✓	2.4 GHz	100 mW	7–32 VDC	Internal	CAN	No	No
BU-2H6R-INT-LVA†	2.4 GHz	100 mW	7–28 VAC	Internal	RS-232	Yes	Yes
BU-2H6R-INT-LVA-CAN✓†	2.4 GHz	100 mW	7–28 VAC	Internal	CAN	Yes	No
BU-2H6R-INT-LVA-NOS	2.4 GHz	100 mW	7–28 VAC	Internal	RS-232	No	Yes
BU-2H6R-INT-LVA-NOS-CAN✓	2.4 GHz	100 mW	7–28 VAC	Internal	CAN	No	No
BU-2H6R-INT-HVU†	2.4 GHz	100 mW	100–240 VAC	Internal	RS-232	Yes	Yes
BU-2H6R-INT-HVU-CAN✓†	2.4 GHz	100 mW	100–240 VAC	Internal	CAN	Yes	No
BU-2H6R-INT-HVU-NOS	2.4 GHz	100 mW	100–240 VAC	Internal	RS-232	No	Yes
BU-2H6R-INT-HVU-NOS-CAN✓	2.4 GHz	100 mW	100–240 VAC	Internal	CAN	No	No
BU-2H6R-EXT-LVD	2.4 GHz	100 mW	7–32 VDC	External	RS-232	Yes	Yes
BU-2H6R-EXT-LVD-CAN✓	2.4 GHz	100 mW	7–32 VDC	External	CAN	Yes	No
BU-2H6R-EXT-LVD-NOS	2.4 GHz	100 mW	7–32 VDC	External	RS-232	No	Yes
BU-2H6R-EXT-LVD-NOS-CAN✓	2.4 GHz	100 mW	7–32 VDC	External	CAN	No	No
BU-2H6R-EXT-LVA†	2.4 GHz	100 mW	7–28 VAC	External	RS-232	Yes	Yes
BU-2H6R-EXT-LVA-CAN✓†	2.4 GHz	100 mW	7–28 VAC	External	CAN	Yes	No
BU-2H6R-EXT-LVA-NOS	2.4 GHz	100 mW	7–28 VAC	External	RS-232	No	Yes
BU-2H6R-EXT-LVA-NOS-CAN✓	2.4 GHz	100 mW	7–28 VAC	External	CAN	No	No
BU-2H6R-EXT-HVU†	2.4 GHz	100 mW	100–240 VAC	External	RS-232	Yes	Yes
BU-2H6R-EXT-HVU-CAN✓†	2.4 GHz	100 mW	100–240 VAC	External	CAN	Yes	No
BU-2H6R-EXT-HVU-NOS	2.4 GHz	100 mW	100–240 VAC	External	RS-232	No	Yes
BU-2H6R-EXT-HVU-NOS-CAN✓	2.4 GHz	100 mW	100–240 VAC	External	CAN	No	No

✓ **Note:** BU-xH6R-CAN units are internally terminated at 4.3kΩ. Termination can be removed at the factory.

† **Note:** Arc suppression may not be a good choice for specific applications.