

# USB Port Guardian

## Model UH201

### Compact USB "key" isolator for mobile applications

- ✓ **2000 Volt Isolation**
- ✓ **ESD Protection – 4 kV Contact**
- ✓ **Compact USB "Key" Enclosure**
- ✓ **USB 2.0 – Full Speed (12 Mbps)**

USB has become the standard for connecting everything from sensors to controllers and motor drives to your PC or hand held computer. But USB was not intended for use outside of the electrically clean office or home environment. This can lead to expensive problems when you need to access data from a device installed in the field or in the factory.

Any time you connect remote I/O equipment to your computer there will be a risk for electrostatic discharge (ESD), power surges, ground loops, and electromagnetic interference /radio frequency interference (EMI/RFI). Any one of these events could damage your USB port or your entire PC. Why take a chance? Protect your investment with isolation technology from B&B Electronics.

The compact UH201 fits easily inside your laptop case or pocket. It has male and female type A USB connectors. It connects directly to your USB port and provides protection up to 2000 Volts. Its high speed digital isolation chip electrically separates your PC from the remote I/O device while allowing full speed USB 2.0 communications at data rates up to 12 Mbps – the top of the line for isolation products.

High speed, 480 Mbps USB 2.0 devices can not be isolated with today's technology.



### Specifications

USB Interface	
Standards	USB 2.0 (At USB 1.1 speed)
Upstream Port	Type A Male
Downstream Port	Type A Female
Speed	12 Mbps
	High Speed 480 Mbps is not possible with existing isolation technology
Isolation	2.0 kV
Surge Protection	± 0.5 kV DC Ports, ± 1 kV Signal Ports
ESD	Level 4 15 kV Air, 8 kV Contact
Power	
Source	Bus Powered
Downstream Power	400 mA when connected to a high power port
Mechanical	
Dimensions	2.0 x 1.0 x 0.5 in (5.0 x 25 x 1.2 cm)
Enclosure	IP 30, Plastic
Weight	0.05 lbs (22.7 g)
MTBF	2,624,561 hours
MTBF Calc. Method	MIL 217F Parts Count Reliability
Environmental	
Operating Temperature	-40 to 80°C
Storage Temperature	-40 to 80°C
Operating Humidity	0 to 95% Non-condensing

### Ordering Information

UH201 Compact USB "Key" Isolator

Approvals / Certifications			
Emissions	FCC Class A, CISPR Class A (EN55022)		
CE	EN61000-6-2:2005	(Light Industrial)	
	EN61000-4-2:2008	(ESD)	± 4 kV contact, ±15 kV air
	EN61000-4-3:2006	(RI)	3 V/m
	EN61000-4-4:2004	(EFT Burst)	500 V
	EN61000-4-6:2005	(CI)	3 Vrms

