# Storm Interface

**Secured, sealed and toughened data entry devices**

# 450i & 450 SERIES

## USB 2.0 Keypad Encoder

This self-contained device is ready to use. It can be easily attached to the rear surface of most Storm keypads to provide connectivity and communication with USB compatible host systems. Factory configured for standard numeric data entry, this versatile device can also be user programmed to output custom characters or data strings; making the 450 Series Encoder the ideal keypad interface for most applications.

### Features
- Direct connection to keypad via integral 0.1" pitch, square pin, female connector (included)
- Connection to host system via cable fitted with USB Mini-B male connector (supplied separately)
- Integral cable tie anchor points to secure USB cable

### Compliance *(designed to meet)*
- EU RoHS
- EU Low Voltage Directive
- EMC: Emissions and Immunity: FCC part 15 class A
- EN55022, EN55024
- ESD: Up to +/- 15kV air discharge, +/- 7.5kV contact discharge
- WEEE Directive compliant

### Performance

| | |
|---|---|
| Operational temperature | -20°C to +60°C |
| Storage temperature | -20°C to +70°C |
| Humidity | 10% to 90% non-condensing |
| Vibration and shock | ETSI 300 019 5M3 |
| Insulation resistance | 50Mohms (min) |
| Breakdown voltage | 500V a.c. (60 secs) |
| Operating voltage | 5V +/- 5% (USB) |
| Operating current | 20mA (excluding keypad illumination current) |

75mm

24mm    34mm

- Generic keyboard (HID) device – no additional drivers needed
- Factory configured to encode telephone or calculator format numeric keypads
- Output code table can be customised using the USB Configuration Utility (available for free download from www.storm-interface.com)
- Integrated power supply for keypad illumination
  450i version provides additional colour and brightness control for keypad illumination (where fitted)
- 450i version features a piezo sounder for optional key press confirmation or status signal
- Simple connection via a USB Mini-B socket
- Compact, self contained form factor
  Compatible with most Storm 4, 12 and 16 key format keypads (including Storm 700, 720,1000, 2000, 3000, GFX and PLX product series)

### Part No.s
| 450i | 4500-10 |
| 450 | 4500-00 |

### Accessories
- USB cable fitted with 90° angled Mini-B male connector (to encoder) and USB-A male connector (to host system). — **4500-01**
- Optional encoder configuration software (free download) — **4500-SW01**

**For more information & to order:**

# www.storm-interface.com

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