



All dimensions in mm

- Impact, shock and vibration resistant
- Sealed for use in wet or dirty environments
- Weather resistant for use in exposed locations (optional feature)
- Extended operational temperature range -20°C to +70°C (optional feature)
- Programmable USB display controller and system interface
- Display connects to the host system via a single USB cable with a USB Mini-B connector (cable supplied separately)
- Resistant to petrochemicals, detergents and most commonly used non-abrasive cleaning agents
- Responsive, illuminated menu navigation keys under software control (on/off /flashing) (optional feature)
- Easy to use API with downloadable object code libraries
- USB 2.0 HID compliant device

## Toughened, weather resistant, data displays with integral USB 2.0 interface

These robust, monochrome displays are ideal for use in exposed or industrial environments. Bright white transreflective display technology is securely encased within a sealed and impact resistant bezel. The bezel features a hard coated UV and scratch resistant, polycarbonate window.

Available in either 20 character x 4 line, 20 character x 8 line or 128 x 64 pixel graphic versions these USB 2.0 display devices can be easily installed into any control panel or equipment enclosure.

The display assemblies can be specified with or without three independently illuminated menu navigation keys. Illumination is under software control (on/off/flashing).

Offered in eight different configurations/specifications, Storm 5100 Series Displays are rated for use in either Industrial (IND) or Extreme (EXM) environments. They offer a 'ready to use' display solution for a wide range of indoor or outdoor applications.

### Performance

Operational key life: >2 million cycles per key



### Environmental

Operational temperature: 0°C to +60°C (optionally -20°C to +70°C)



Storage temperature: -20°C to +70°C

Humidity: 5%RH to 95%RH non-condensing



Vibration and shock: ETSI 300 019 5M3 (optionally 6M3)

Water and dust resistance: IP54 (optionally IP65)

Impact resistant: 5J (optionally 10J)

### Electrical

Insulation resistance: 50Mohms (min)  
Breakdown voltage: 500V a.c. (60 secs)  
Max Operating voltage: 5V  
Max Operating current: 50mA



### Compliance

This device is designed to meet:



- EU RoHS
- EU Low Voltage Directive
- ESD: Up to +/- 15kV air discharge, +/- 7.5kV contact discharge
- WEEE Directive
- EMC-CE, FCC Part 15B Class B
- EN55022 Class B, EN60950, EN55024



### Additional Information

(downloads available at [www.storm-interface.com](http://www.storm-interface.com))

- Engineering Manual including product dimensions and installation / configuration instructions
- CAD files (dxf, dwg)
- API Object code libraries
- Test data and reports

### Accessories

- USB Cable for use with USB Interface
- Under panel fitting kit





## Configuration Utility Software for Storm 5100 Series Toughened USB 2.0 Data Displays

Storm 5100 Series Toughened Data Displays can be configured by the Configuration Utility Software via the Application Programming Interface for Windows (API). These software tools are available free of charge and can be downloaded from [www.storm-interface.com](http://www.storm-interface.com). Please note: Registration is required for download.

### Primary Features of the Configuration Utility

- Selection of font for 5100 Series character displays
  - Two standard fonts are available:
    - 6 x 8. This provides 8 lines with 20 characters per line
    - 6 x 16. This provides 4 lines with 20 characters per line
  - Each font includes the following character set:  
!"#\$%&'()\*+,-.0123456789:;<=>?@ABCDEFGHIJKLMNPNOPQR  
STUVWXYZ[/\^\_`abcdefghijklmnopqrstuvwxyz{|}~
  - There is also a large font numeric character set:  
0123456789,.°±
- The 5100 Series graphic display is 128 x 64 pixels.
- Features supported by the Configuration Utility and API include:
 

|                                                                                                                                                                                                                                                                 |                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Integral display backlight (on/off/flashing)</li> <li>Illumination of three navigation keys (on/off/flashing)</li> <li>Display contrast level</li> <li>Flip (180° rotation)</li> <li>Inverse (white on black)</li> </ul> | <ul style="list-style-type: none"> <li>Circle, rectangle and line</li> <li>Bar graph</li> <li>Large font</li> <li>Re-set to factory default</li> <li>Firmware updates</li> </ul> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
- The utility will load up to four bitmap graphic icons (maximum size 128 x 64 pixels). Any one icon can be set as the default 'power-up' screen. Icons can be originated using Microsoft Paint and previewed using the Configuration Utility before loading to the display.
- The display enumerates as an HID compliant device.

Windows and Microsoft Paint are recognised trademarks of the Microsoft Corporation.

### Storm 5100 Series character display

#### 5100 (IND)



- USB
- 3 keys or display only
- 4 or 8 line x 20 characters
- IP54
- 0°C to 60°C
- 5J impact
- shock and vibration IEC721-5M3

#### 5100 (EXM)



- USB
- 3 keys or display only
- 4 or 8 line x 20 characters
- IP65
- -20°C to 70°C
- 10J impact
- shock and vibration IEC721-6M3

### Storm 5100 Series graphic display

#### 5100 (IND)



- USB
- 3 keys or display only
- 128 x 64 pixels
- IP54
- 0°C to 60°C
- 5J impact
- shock and vibration IEC721-5M3

#### 5100 (EXM)



- USB
- 3 keys or display only
- 128 x 64 pixels
- IP65
- -20°C to 70°C
- 10J impact
- shock and vibration IEC721-6M3



### Part Numbers

#### 5100 (IND) – INDUSTRIAL

|  |                                              |          |
|--|----------------------------------------------|----------|
|  | 4 or 8 x 20 character display, 3 keys        | 5103-000 |
|  | 128 x 64 pixel graphic display, 3 keys       | 5103-100 |
|  | 4 or 8 x 20 character display, display only  | 5100-000 |
|  | 128 x 64 pixel graphic display, display only | 5100-100 |

#### 5100 (EXM) – EXTREME

|  |                                              |          |
|--|----------------------------------------------|----------|
|  | 4 or 8 x 20 character display, 3 keys        | 5103-010 |
|  | 128 x 64 pixel graphic display, 3 keys       | 5103-110 |
|  | 4 or 8 x 20 character display, display only  | 5100-010 |
|  | 128 x 64 pixel graphic display, display only | 5100-110 |

#### Accessories

|                                     |          |
|-------------------------------------|----------|
| USB Cable (USB A to 90° USB mini-B) | 4500-01  |
| Under panel fitting kit             | 5100-FK0 |

For more information & to order:

[www.storm-interface.com](http://www.storm-interface.com)



Whilst every effort is made to ensure details are correct at time of print, specifications are subject to change without notice.

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5100 Jan 2014



FM 39602