

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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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 transflective 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:



**Environmental** Operational temperature:



Storage temperature: Humidity:



Vibration and shock:

Water and dust resistance: Impact resistant:

### **Electrical**

Insulation resistance: Breakdown voltage: Max Operating voltage: Max Operating current:

50Mohms (min) 500V a.c. (60 secs)

5J (optionally 10J)

IP54 (optionally IP65)

-20°C to +70°C

5%RH to 95%RH ETSI 300 019 5M3 (optionally 6M3)

>2 million cycles per key

 $0^{\circ}$ C to +60°C (optionally -20°C to +70°C)

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)

- 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. 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:;<=>?@ABCDEFGHIJKLMNOPQR STUVWXYZ[/]^\_'abcdefghijklmnopqstuvwxyz{|}~ 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:

Integral display backlight (on/off/flashing) Illumination of three navigation keys (on/off/flashing) Display contrast level Flip (180° rotation) Inverse (white on black)

Circle, rectangle and line Bar graph Large font Re-set to factory default Firmware updates

- 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.

128 x 64 pixel graphic display, 3 keys

4 or 8 x 20 character display, display only

128 x 64 pixel graphic display, display only

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

#### **Part Numbers** 5100 (IND) - INDUSTRIAL **Accessories** USB Cable 4 or 8 x 20 character display, 3 keys 5103-000 4500-01 128 x 64 pixel graphic display, 3 keys 5103-100 (USB A to 90° USB mini-B) 4 or 8 x 20 character display, display only 5100-000 128 x 64 pixel graphic display, display only 5100-100 Under panel 5100-FK0 fitting kit 5100 (EXM) - EXTREME 4 or 8 x 20 character display, 3 keys 5103-010

5103-110

5100-010

5100-110

#### 5100 (IND)



Storm 5100 Series character display

- 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

### 5100 (IND)



Storm 5100 Series graphic display

- 3 keys or display only
- 128 x 64 pixels
- IP54

USB

- 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



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