

# **storm** 2000 Series Keypads



## **Robust keypads for harsh industrial use**

- *Rapid, responsive and reliable data entry in wet, dirty or extreme conditions*
- *Vandal resistant (20J BS EN 60068-2-75: 1997)*
- *Weather, water and dust resistant (IP65)*
- *4 key, 12 key and 16 key formats*
- *Raised "home pip" on the "5" key*
- *Simple 'row and column' circuit matrix, terminated by a male, gold-plated, square pin, 0.1" (2.54mm) pitch connector with locking ramp*
- *Can be fixed to a flat surface or under panel mounted for a flush, low profile installation*



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

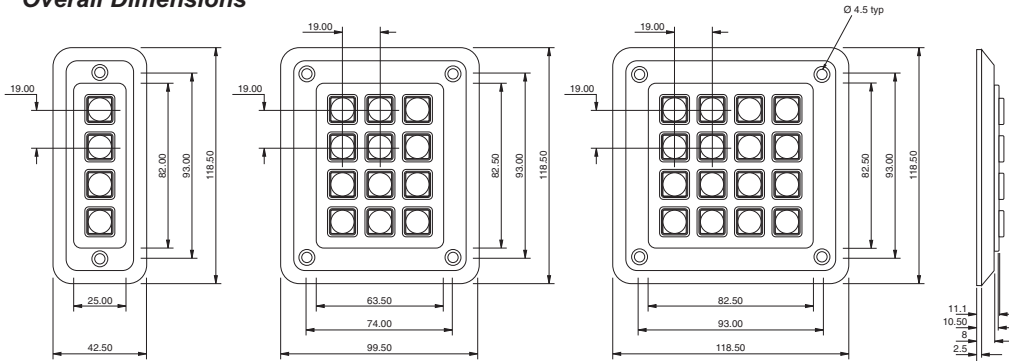
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# storm

## 2000 Series tough impact resistant keypads

Suitable for use in harsh industrial and exposed, outdoor environments. Typical applications include industrial process control, military equipment, instrumentation and access control. Constructed from an advanced super high impact polymer. These responsive keypads are built to survive.

### Overall Dimensions



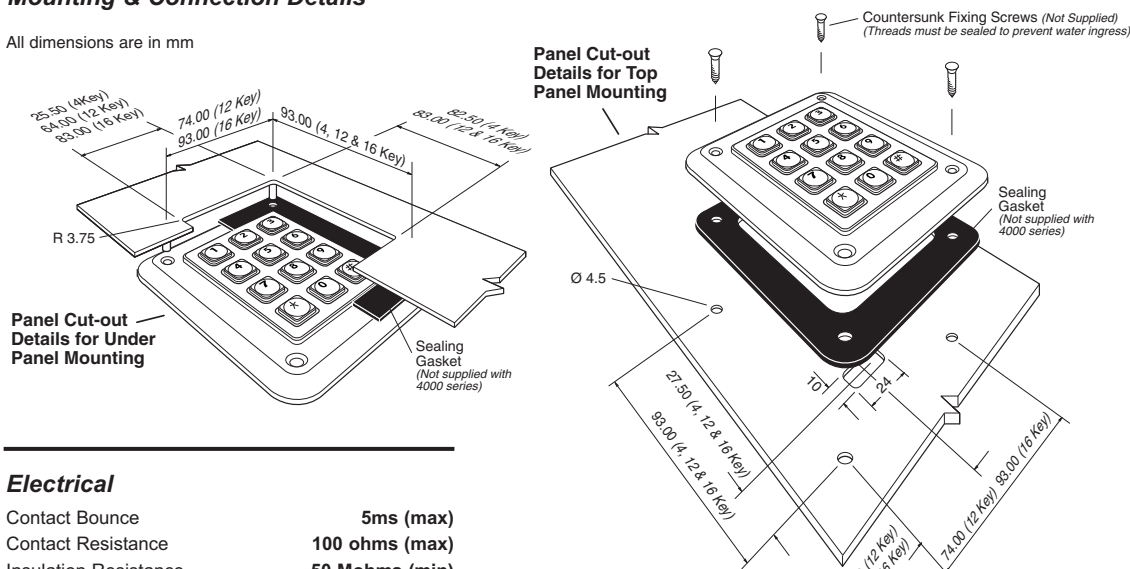
Part No.s  
2K0421 (F1-F4)  
2K0411 (← ↓ ↑ →)

2K12T1 (Tel. Format)  
2K1201 (Calc. Format)

2K16T1 (Tel. Format)  
2K1601 (Calc. Format)

### Mounting & Connection Details

All dimensions are in mm



### Electrical

Contact Bounce	5ms (max)
Contact Resistance	100 ohms (max)
Insulation Resistance	50 Mohms (min)
Breakdown Voltage	500V AC (max 60 secs.)
Operating Voltage	24V DC (max)
Operating Current	50mA (max)

### Mechanical

Operational Life	4 million cycles (min) per key
Keytop Travel	1.4mm nominal
Actuation Force	180gms nominal
Connector	0.1" pitch, gold plated square pin, male connector

### Environmental

Water / Dust Sealed	IP65 (when mounted to suitable enclosure)
Operational Temperature	-25°C to +85°C (Dry)

### Material

Casing	Super High Impact Polymer (mid grey)
Keytops	Super High Impact Polymer (mid grey)
Keytop Legends	Engraved
Contact Circuit	Gold on Nickel plated FR4

### Accessories

Item	Stock No.	Notes
PC Interface	4200-000[x]	RS232
Rear Casing	RC12020[x]	Supplied complete with fixing hardware, sealing gaskets and fixing instructions. Providing space for additional components or circuitry (12 key formats only)
Blank Keytops	1K0000[x]	Supplied without keytop graphics. Suitable for engraving. set of four
Privacy Shield	1KFS020[x]	Supplied complete with fixing hardware, sealing gaskets and fixing instructions. 12 key only.

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



Designed & produced by  
NIK Design  
www.nikdesign.co.uk

2000-LIT-01 Rev 4  
Nov 2008



FM 39602



### Connection Details for 4 Key Keypad

CONTACT CONNECTIONS  
● ● ● ● ● ●  
5 4 3 2 1  
(As viewed from rear of keypad)

A  1  
B   
C   
D

KEY LOCATION  
(As viewed from front of keypad)

CONTACT MATRIX	
CONN. PIN	ROW/COLUMN
1	common
2	D
3	C
4	B
5	A

### Connection Details for 12 Key Keypad

CONTACT CONNECTIONS  
● ● ● ● ● ● ● ● ● ● ● ●  
8 7 6 5 4 3 2 1  
(As viewed from rear of keypad)

A  1  2  3  
B   
C   
D

KEY LOCATION  
(As viewed from front of keypad)

CONTACT MATRIX	
CONN. PIN	ROW/COLUMN
1	A
2	B
3	1
4	2
5	3
6	-
7	D
8	C

### Connection Details for 16 Key Keypad

CONTACT CONNECTIONS  
● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●  
8 7 6 5 4 3 2 1  
(As viewed from rear of keypad)

A  1  2  3  4  
B   
C   
D

KEY LOCATION  
(As viewed from front of keypad)

CONTACT MATRIX	
CONN. PIN	ROW/COLUMN
1	A
2	B
3	1
4	2
5	3
6	4
7	D
8	C



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