

# POWERKEY 1000 CAN



CANopen  
J1939



## FLEXIBLE - SMART - RUGGED

**Blink PowerKey 1000 CAN** keypad combines the styling and compact package size of the PowerKey family with the software features and network capabilities of Blink popular PowerKey Pro family. The PowerKey 1000 CAN keypad is the perfect lightweight and flexible solution for any application.

### SOFTWARE FEATURES

**CAN and RS485 Keypad Addresses** – Assign any valid CAN (J1939) address to the keypad while also assigning the same or a different RS485 address. Communicate on either BUS simultaneously.

**CANopen Communications Protocol** – Fully compliant with Device Profile 401d.

**J1939 Address Claim Transmission** – Keypads no longer have to be pre-programmed to a specific address. This enables customers that work in applications in the field without access to a GUI to use any replacement keypad on-hand. The keypad can be configured to automatically announce its address and accept a new address assignment as appropriate.

**Event Status Transmission** – The keypad can send messages to the BUS indicating a button press or a button release event has occurred. This confirmation allows digital systems to have the same input acknowledgements as that of the latching position of a mechanical switch.

**Periodic Status Transmission** – The keypad sends a continuous broadcast of messages indicating the press or release status of each button at that instance. The frequency of these messages but can be adjusted in a wide range.

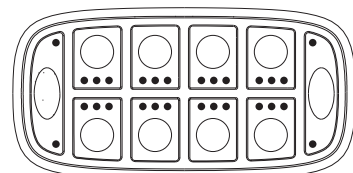
**Periodic Heartbeat** – The keypad sends a continuous broadcast of messages indicating it is functioning correctly. The frequency of these messages but can be adjusted in a wide range.

### HARDWARE FEATURES

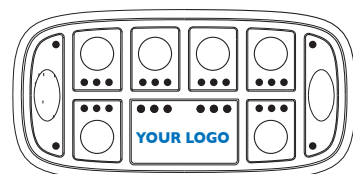
**IP67/NEMA6 rating** – Guaranteed to be dust tight and sealed against water immersion to a depth of 1 meter for up to 1 hour.

**UV Protected** – UVB 400 hours: Keypad is highly resistant to deterioration caused by exposure to sunlight.

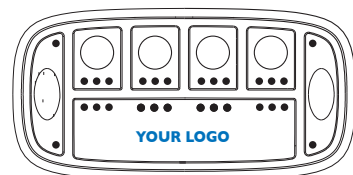
### THREE MODELS



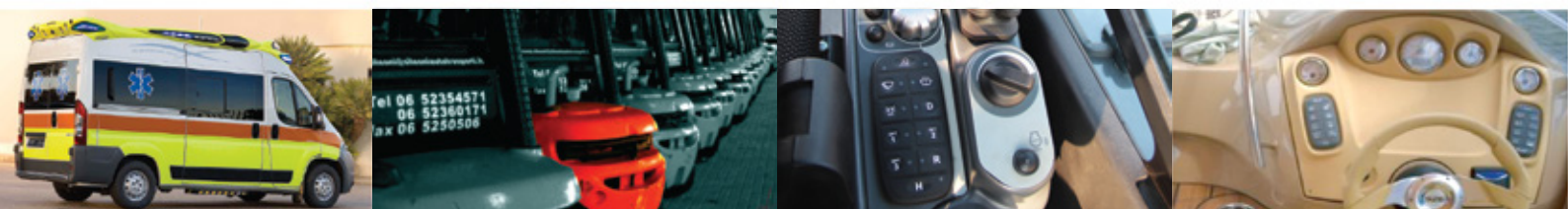
10 Keys



8 Keys



6 Keys



Icons shown on this keypad are for visual demonstration only.

## STANDARD FEATURES

- Custom laser etched icons
- Multiple LED status indicators per function
- Low profile
- Compact
- Vertical or horizontal mount
- Overlay
- Laser Etch
- Pad Print
- Flush-mount or front-mount
- LED backlit icons
- ON/OFF, momentary, toggle & scroll

## SOFTWARE FEATURES

- Change CAN keypad addresses independently
- Periodic Status transmission
- Heartbeat
- Event status transmission
- LED acknowledgement
- Address claim transmission
- CANopen, J1939

## OTHER BENEFITS

- Programmer's manual available to help support
- plug-and-play reconfigurability
- Available in fixed legends

## SPECIFICATIONS FOR STANDARD KEYPADS

ELECTRICAL	
Supply Voltage	12-24Vdc Nominal (8-32VDC)
Standby Current	<50 mA
Communication BUS	RS485, CANopen, J1939
MECHANICAL	
Connector	Deutsch DT04-4P, Molex 19418-0004, Micro-C and more
Switch Life	3 million operations
Mechanical Shock	X, Y, Z 50Gs 11ms
Vibration	X, Y, Z 10 - 150Hz 0.15mm amp
Mounting Studs	#10-32 CDA-510 phosphor bronze, electroplated bright tin
Keypad	Silicone rubber with polyurethane hardcoat
PC Board	1,6mm thick, Nema Grade FR-4, double clad with 1oz copper
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
Thermal Shock	-40°C to +72°C @ 4°C/Min
Humidity	0 to 98% (no condensation)
UV Protection	UVB 400 hours
Salt Spray	Per ASTM B117
Chemical Resistance	Deet, Engine Cleaner, Isopropyl Alcohol, Suntan Lotion, Multi-Purpose Cleaner, Orange Citrus Cleaner
Ingress Protection Rating	IP67/NEMA6

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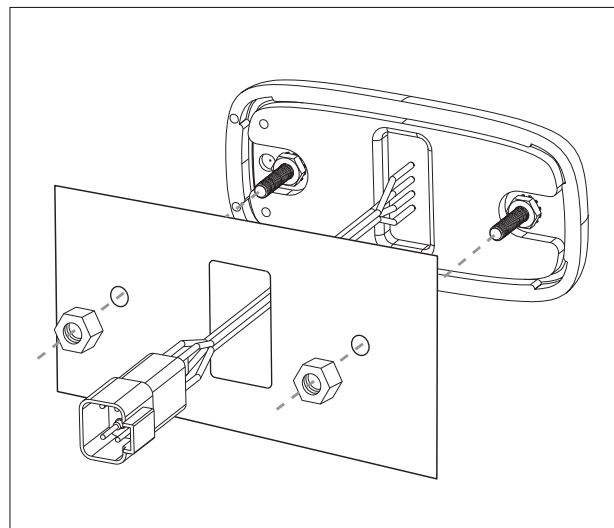
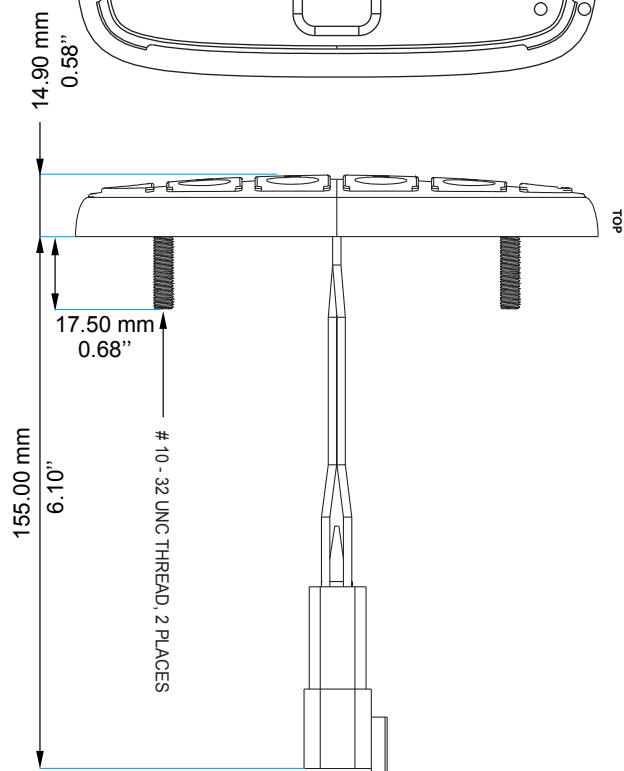
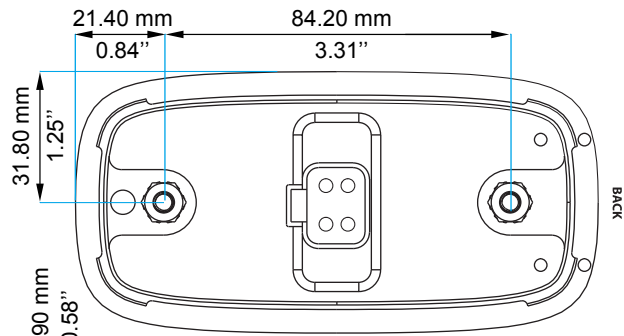
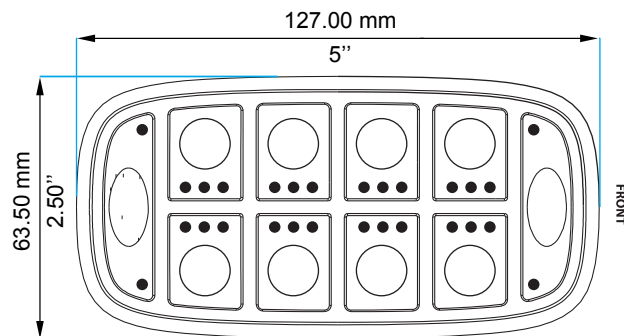
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# POWERKEY 1400 CAN



CANopen  
J1939



## FLEXIBLE - SMART - RUGGED

**PowerKey1400** is the flagship model for Blink Marine's IP67 keypads. It boasts 14 keys and is available with CANopen, J1939 and RS485 protocols. Compact and elegant, the rubber element of the PowerKey 1400 can be personalized for both the icons and the numbers of led assigned to each individual key. The keypad is also clearly visible in the dark thanks to its LED RGB backlights.

### SOFTWARE FEATURES

**CAN and RS485 Keypad Addresses** - Assign any valid CAN (J1939) address to the keypad while also assigning the same or a different RS485 address. Communicate on either BUS simultaneously.

**J1939 Address Claim Transmission** - Keypads no longer have to be pre-programmed to a specific address. The keypad can be configured to automatically announce its address and accept a new address assignment as appropriate.

**Event Status Transmission** - The keypad can send messages to the BUS indicating a button press or a button release event has occurred. This confirmation allows digital systems to have the same input acknowledgements as that of the latching position of a mechanical switch.

**Periodic Status Transmission** - The keypad sends a continuous broadcast of messages indicating the press or release status of each button at that instance. The frequency of these messages but can be adjusted in a wide range.

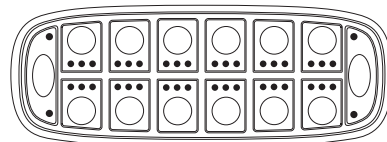
**Periodic Heartbeat** - The keypad sends a continuous broadcast of messages indicating it is functioning correctly. The frequency of these messages but can be adjusted in a wide range.

### HARDWARE FEATURES

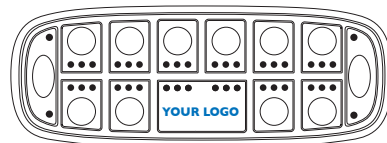
**IP67/NEMA6 rating** - Guaranteed to be dust tight and sealed against water immersion to a depth of 1 meter for up to 30 min.

**UV Protected** - UVB 400 hours: keypad is highly resistant to deterioration caused by exposure to sunlight.

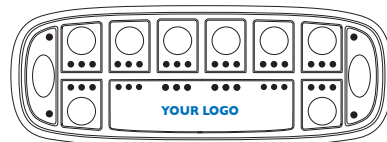
### THREE MODELS



14 Keys



12 Keys



10 Keys



Icons shown on this keypad are for visual demonstration only.

## STANDARD FEATURES

- Custom laser etched icons
- Multiple LED status indicators per function
- Multicolor indicator LED
- Low profile
- Compact
- Vertical or horizontal mount
- Overlay
- Laser Etch
- Pad Print
- Flush-mount or front-mount
- LED backlit icons
- ON/OFF, momentary, toggle & scroll

## SOFTWARE FEATURES

- Change CAN keypad addresses independently
- Periodic Status transmission
- Heartbeat
- Event status transmission
- LED acknowledgement
- Address claim transmission
- RS485, CANopen, J1939

## OTHER BENEFITS

- Programmer's manual available to help support plug-and-play reconfigurability
- Available in fixed legends

## SPECIFICATIONS FOR STANDARD KEYPADS

### ELECTRICAL

Supply Voltage	12-24Vdc Nominal (8-32VDC)
Standby Current	<50 mA
Communication BUS	RS485, CANopen, J1939

### MECHANICAL

Connector	Deutsch DT04-4P
Switch Life	3 million operations
Mechanical Shock	X, Y, Z 50Gs 11ms
Vibration	X, Y, Z 10 - 150Hz 0.15mm amp
Mounting Studs	#10-32 CDA-510 phosphor bronze, electroplated bright tin
Keypad	Silicone rubber with polyurethane hardcoat
PC Board	1,6mm thick, Nema Grade FR-4, double clad with 1oz copper
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
Thermal Shock	-40°C to +85°C @ 2°C/Min
Humidity	0 to 98% (no condensation)
UV Protection	UVB 400 hours
Salt Spray	Per ASTM B117
Chemical Resistance	Deet, Engine Cleaner, Isopropyl Alcohol, Suntan Lotion, Multi-Purpose Cleaner, Orange Citrus Cleaner
Ingress Protection Rating	IP67/NEMA6

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