IS-S0109DEM Single Switch Solution



## Single Switch Solution in Smallest Panel Mount Display for Monitoring & Controlling Real World Applications

## **DISTINCTIVE CHARACTERISTICS**

- SmartDisplay switch is a graphic 36 x 24 pixel LCD with RGB backlight options
- Internal fonts 5 x 7 and 7 x 10 pixels for creating characters
- Display up to three lines of six characters in 5 x 7 pixel font
- Display up to two lines of four characters in 7 x 10 pixel font
- 64 backlight colors/blinking for various modes of operation
- Eight levels of brightness for backlight
- Connection to application via standard 2 x 9 header (0.1" x 0.1")
- Up to 12 digital inputs/outputs or analog to digital converter; one PWM
- All the I/O are 5V level
- 12C, SPI, UART communications options
- EMC/ESD compliance based on IEC 60601-11-2:2014
- Interface boards available for conversion from analog/digital input to proper voltage and from digital I/O to proper voltage/current for the purpose of sensing and turning devices off and on
- Unique firmware for each application written by NKK Switches
- Tactile touch and low energy consumption. Panel mount for easy installation
- Demo board for programming, testing and demonstrating the features



The Single Switch Solution is a compact device that is capable of both monitoring and managing an industrial process independently or in conjunction with other controllers. It is a plug and play device that requires little or no technical or engineering skill to install and operate, capable of displaying 64 backlight colors/blinking options for status color schemes and modes of operation. In addition to the on-board flash, which can accommodate as many as 64 graphic images, there are two look-up fonts  $(5 \times 7)$  and  $(5 \times 7)$  and  $(5 \times 7)$  on board to create images based on characters.



The analog inputs may be used to check status of gauges such as temperature, pressure, voltage, amperage, oil or gas levels, etc. The digital inputs can be used to check ON/OFF status of devices or to count the frequency of an event. The digital output can be used to signal to turn a device on or off based on preset values of the inputs. The digital input/output can be used for communication with another device, and there can be one PWM output. Switch presses can allow toggling between status, and pressing and holding the switch permits setting up or selecting an option.

NKK Switches provides a full suite of design solutions for upgrading and enhancing user interface. Facilitating a subsystem to plug into an existing system for a seamless startup, a team of experts can provide system design, ongoing application support, value added services and product assembly.

Contact engineering@nkkswitches with any questions.

## **GENERAL SPECIFICATIONS**

**Input Voltage:** 5V or 7V to 15V

Current: 8mA to 30mA (depends on backlight brightness and colors; does not include output pin usage

Operating Temperature:  $-20^{\circ}\text{C} \sim +60^{\circ}\text{C} (-4^{\circ}\text{F} \sim +140^{\circ}\text{F})$ 



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