

Custom designed keyboards with integrated electronics

Switch activation tailored to customer specification

Switch life exceeds 1,000,000 activations

Illuminated line selects

Flexible production facility able to accommodate low and high volumes

Competitive pricing

Fast prototyping

CMC Electronics is a world leader in high-reliability Illuminated Keyboard Assemblies for the aerospace industry. From system definition to qualification, we provide constant support and dedicated manufacturing facilities.

Our goal is customer satisfaction. Whether you need an integrated switch panel or integrated keyboard, we have the flexibility to meet your needs.

Our team of qualified engineers are experts in developing innovative designs that will meet your most stringent requirements. We provide invaluable help when you decide to update your keyboard designs to replace older incandescent backlighting with higher performing LEDs.

We can integrate electronics of different levels of complexity, from photodiodes to micro-processor logic for a complete, host-ready sub-system, using the latest switch-key technology.

From customized tactile response to illuminated line selects, CMC Electronics strives to produce the optimal solution for your application. Let us give form to your keyboard needs.

#### SPECIFICATIONS

- Aluminum, MIL-PRF-5425 acrylic or molded frame.
- Acrylic, polycarbonate or silicone rubber keys.
- LED, incandescent or EL illumination source.
- Integrated driving electronics for LED modulation, available for 28 VDC, 5 VDC and 5 VAC supply.
- Illuminated line selects in aluminum or plastic frame with uniform surface finish
- Illumination performance IAW SAE-AS7788 or customer specific requirements.
- Annunciators, designed per customer requirements or MIL-S-22885 optical performance.



#### ELECTRICAL

- Assembly of optical filters with MIL-C-14806 or MIL-C-675 anti-reflective coating with optional ITO coating.
- Finishing as per FED-STD-595 color or custom specific.
- Laser etched marking per SAE-AS18012, design of custom font and symbols.
- Switching power .2 VA to 3 W
- Switching voltage min/max 20 mV/100 V
- Switching current min/max 1 mA/50 mA
- Dielectric strength (50 Hz, 1 min) >250 V
- Operating life >1,000,000 activations
- Contact resistance >10E9 ohm
- Contact bounce <1 ms

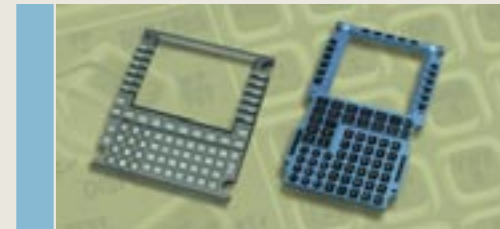
#### CONSTRUCTION

- High-performance integrated dome switches with positive tactile feedback.
- Momentary action, SPST gold or silver contact.
- Surface mount technology or PC pins/tabs.
- Sealed component.

#### ENVIRONMENTAL

CMC's keyboards are designed and manufactured to exceed environmental requirements of MIL-STD-810, RTCA/DO-160 and many other industry specifications.

## AEROSPACE KEYBOARDS



CMC Electronics –  
A World Leader in  
Custom Display  
Products

