Smart card connectors maximize electrical performance

C&K Components has designed a rugged smart card connector with a built-in card detection switch for machine-to-machine applications. Designated the CCM03 Series and CCM04 Series respectively, the harsh environment connectors meet IEC 512 certification and are resistant to shock, vibration, humidity and extreme temperatures. The CCM03 and CCM04 Series Smart Card Connectors are ideal for asset tracking, automotive e-call and tracking, signage, metering, vending machine, security and remote monitoring applications.

Depending on the type, the CCM03 Series features an insulated normally open (NO) card detection switch or increased contact forces for maximum vibration resistance. Both series are available with standard gold plated contacts or with specific inlay alloy for increase wear and corrosion resistance.

The smart card connectors deliver an advanced contact system that optimizes electrical performance, flexibility and reliability, while minimizing the electrical contact resistance and overall cost. The CCM03 and CCM04 Series smart card connectors feature six or 8 contacts and a mechanical life of 10,000 to 50,000 cycles, depending on the type.

“Machine-to-machine devices are often subjected to harsh environmental conditions, including high temperatures, vibration, dust, moisture and other contaminants. The CCM03 and CCM04 Series smart card connectors provide the ruggedness and reliability required for such applications while offering high density contact and maximizing performance,” said Jean-Michel Bourin, business development manager at C&K Components.

The CCM03 provides a maximum card insertion force of 3N for fixed cover and 1N for hinged cover with a contact force ranging from 0.25N to 0.50N. The CCM04 Series has a 10N maximum insertion force and a contact force ranging from 0.4N to 0.7N.

The smart card connectors are RoHs compliant and feature high-temperature thermoplastics. The connectors are compatible with automatic pick-and-place equipment and lead free SMT reflow soldering process.

The C&K Components connector catalog detailing the full range of smart card connector products and specifications can be downloaded at www.ck-components.com [1]. Typical pricing for the CCM03 and CCM04 smart card connectors range from $0.16 to $1.03 each, depending on type and quantity.

www.ck-components.com [1]

Source URL (retrieved on *12/12/2013 - 8:29am*):
http://www.ecnmag.com/products/2011/12/smart-card-connectors-maximize-electrical-performance

Links:
[1] http://www.ck-components.com