

CM290A Module – Product Specification

FEATURES

- **Low cost solution for single, dual, or triple track readers** – available in dual and triple-track models
- **Ultra-compact design** – low-profile read head contains all needed circuits. Save PCB space!
- **No external components** – even the decoupling capacitor is integrated into the read head. Only 4 signals, VDD, VSS, DATA, and STROBE to connect to your micro-controller for up to 3 tracks
- **Data buffer with Shift-Out** – allows full card data to be locally stored on ASIC. Use a low-cost controller with no interrupts, limited memory, low-speed, low pin-count, etc.
- **High noise immunity** – no more millivolt-level analog signals to route; no analog signals leave the shielded magnetic head! Withstands noisy PC monitors, cell phones, switching power supplies, etc.
- **High performance decoding** – new design reads badly damaged cards; compensates for poor head mounting
- **Low voltage operation** – 2.8 V to 5.5 V
- **Low operating current** – less than 4 mA maximum total current at 3.3V (for up to 3 tracks) while card is being swiped
- **Ultra-low Sleep current** – less than 75 μ A maximum total current when no card is being swiped
- **AGC (Automatic Gain Control)** – reads cards from 30% - 200% of ISO 7811 amplitude standard
- **Simplified firmware** – Shift-Out format makes it easier to write controller code
- **Wide operational temperature range** – -40° C to +70° C
- **Wide range of card swipe speeds** – from 3 ips to 100 ips; 7 cm/s to 250 cm/s

TECHNICAL SPECIFICATIONS

ELECTRICAL	
Electrostatic Discharge	\pm 15kV discharge to head-can with head-can grounded
MECHANICAL	
Dimensions	90mm long
Life	500,000 Passes
ENVIRONMENTAL	
Operating Environment Temperature Relative Humidity	-40 °C to +85 °C (-40 °F to +185 °F) 10% to 90% non-condensing
Storage Environment Temperature Relative Humidity	-40 °C to +100 °C (-40 °F to +212 °F) 10% to 90% non-condensing