



Integrated Pulse Coded Modulation (PCM)

ENCODER

DESIGNED FOR MISSION CRITICAL APPLICATIONS

INVOCON, INC.

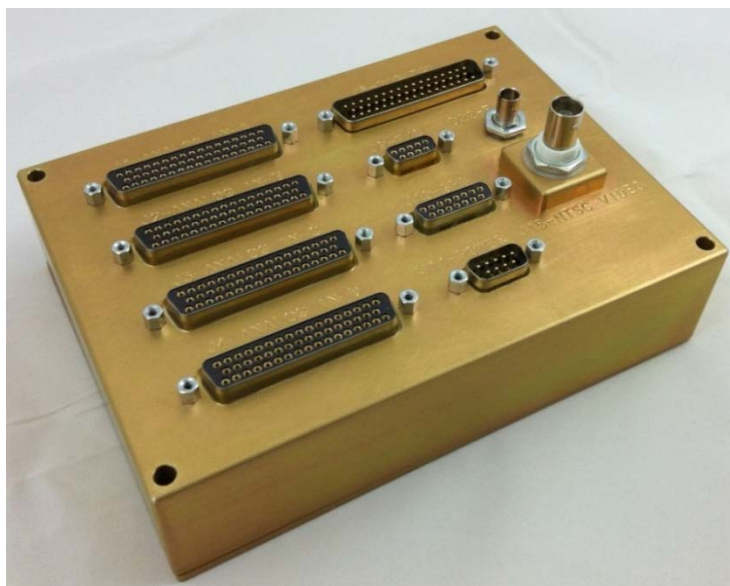
TECHNOLOGY PROFILE 0215

The Integrated PCM Encoder (iPCMe) provides a significant number of data channels for remote sensing and synchronous logging in a highly integrated configuration. With over 100 channels of input in a small package, the iPCMe is designed as a low-cost solution for a broad range of telemetry applications. Every aspect of the Encoder's design is intended to simplify integration and survive rugged launch environments. Robust packaging includes a rugged aluminum enclosure and DB connectors placed on top of the unit. The single orientation for the connectors reduces integration and reconfiguration headaches associated with the complexities of routing and re-routing cables. The common DB connectors add convenience and value by minimizing the cost and lead times associated with more exotic connectors.

The software included with the encoder provides a simple PCM configuration tool that helps to ensure data is packed efficiently into the PCM stream. It also provides real-time display of data as well as health and status from the unit.

Encoder Features:

- 100 analog data channels
 - Simultaneous sampling
 - >15 bits of dynamic range
- 13 digital data channels
 - UART, RS-422, LVDS, or TTL
- 1 NTSC video channel
 - Encodes to JPEG 2000 video format
- Dedicated inputs for GPS & Smart Battery
 - Supports GPS 1PPS redistribution
- PCM Output (copper and fiber)
 - Copper: RS422 or LVDS
 - Fiber: 850nm multimode. Supports 2 km transmission over 50/125 μ m fiber
 - Optional RNRZ-L15 output
- Configuration Port (RS-232)
- Maximum 20Mhz transmission rate
- Supports Invocon's KIPS/WKIPS *Capture Link*TM interface for lethality assessment bandwidth sharing



Specifications for P/N: IVC4481001-301

Electrical	
Input voltage	16 – 50 VDC
Power (typical)	10.6 W
Connectors	D-Sub (power, analog, & digital inputs; telemetry output) BNC (video input) ST fiber (telemetry output)
Mechanical	
Size (L x W x H)	6.72 x 4.85 x 1.66 inches (not including connectors)
Weight	2.9 Lbs.
Case material	6061 aluminum, Alodine coated
Environmental	
Operating Temperature	-24 to 71 °C
Standards	Designed to comply with MIL-STD-461, MIL-STD-810