

By focusing on the unique needs of each customer, Central Railway Manufacturing has worked with leaders in the freight transportation industry to turn their PTC event recording requirements into a reality.

Crash Hardened Memory Module

Central Railway Manufacturing's equipment portfolio includes CHMM, a DOT-certified crashworthy memory module for PTC and LDARS event recording applications. Standalone or used in conjunction with the CRM LEAM, the CHMM is part of a flexible event recording strategy ranging from simple FRA-mandated data acquisition to hardened video storage.

Insight into CHMM technology...

The CHMM employs a modular yet scalable architecture that permits capacity configurations to range from 2GBytes up to 128Gbytes, allowing the end-user to cost-optimize memory requirements to their specific application. For event or video storage applications, the CHMM can be configured to support the following upload interfaces:

- 10/100/1000Mbps Ethernet
- RS-232 Asynchronous
- RS-422/485 Synchronous/Asynchronous
- USB 2.0 device/host
- USB 3.0 device

For data downloads that can be initiated both locally and remotely via one of the network connections, the CHMM supports up to 1000Mbps Ethernet. The CHMM also provides a unique automated walk-up USB interface with optional secure authentication. With this interface, when a properly authenticated thumb drive is inserted into the CHMM, the CHMM will automatically download a user-configurable portion of the hardened memory directly to the drive.



Your data at your fingertips...

Offloaded data files are easily converted to viewable text tables with the CRM Desktop Application (CDA), or can be viewed graphically with the CRM Desktop Player (CDP). In the case of automated downloads, data can be decoded on-the-fly by a user application with CRM's published data-file format, useful for data flow integration with a real-time database of locomotive operation.

Custom user communications options are available on the CHMM. For legacy serial port applications, most existing locomotive asynchronous and synchronous RS-232 and RS-422 protocols are supported. The CHMM also offers a highly configurable operating system that can support many high-end data upload and download features, such as multiple and simultaneous operating instances of FTP servers or lean versions of Secure Copy (SCP). With these types of interfaces, the CHMM can accommodate the information technology requirements of various types of locomotive data management infrastructures.