The effective use of motion video in ISR applications has been hampered by air-to-ground bandwidth limitations and the lack of synchronized metadata in a standard format that would facilitate the sharing of imagery among members of the DoD community.

The Space Dynamics Laboratory (SDL) has designed a full motion video compression solution that can be customized for various sensor systems. SDL’s Motion Video Processor (MVP) is a hardware based video compression card that implements H.264 compression to allow high quality imagery (HDTV resolution) while using a relatively low transfer rate requirement. MVP synchronizes Key-Length-Value (KLV) metadata with the video stream to provide a data stream that is compliant with MISB and STANAG 4609 standards allowing the imagery to be readily shared. The design can be easily customized to fit into weight and size sensitive platforms.

**SPECIFICATIONS**

**ENCODE ENGINE**
- Supports MISP 5.1 & STANAG 4609 Ed. 3
- MISM Level 10H
- H.264 MP @ L4.1
- Supports KLV (Key-Length-Value) metadata

**RESOLUTION**
- 1920 x 1080 max resolution (1080p HDTV format)
- Up to 30 fps for 1080p
- 8-bit color (YCbCr 4:2:0)

**INPUT**
- Analog: NTSC composite video
- Digital: Camera Link (SDL’s EyePod sensor)
  - HDMI & hot link configurable
  - 16-bit color
  - Metadata input: RS-422, GigE, PCI

**OUTPUT**
- GigE (10/100/1000)
- PCI & composite video (without KLV)

**FORM FACTOR**
- PCI & PC104 designs; built to order