

Electronics

Focal Plane Assemblies (FPA), Front End Electronics (FEE), Scanner and actuator control electronics, Image processing

Image Pre-processing and Video Compression

- 48 channels analog video input from FEE, signal conditioning and digitizing
- configurable real time image data pre-processing and data compression features
- data packet formatting and high-speed transmission to on-board storage

Thermal Acquisition and Control

- High resolution and long term stable temperature acquisition of 58 thermistors
- Thermal control electronics for instrument (15 thermal zones), configurable control parameters
- Additional acquisition of 17 voltages for monitoring

FEE Video Control and Power Supply

- Command interface and power supply for 8 Front End Electronics (FEE)
- Clock and synchronization signals for image data transmission from FEE to VCU box

Instrument control and monitoring

- discrete and MIL-BUS telemetry functions and housekeeping as required for observability (discrete temperatures, on/off and health status; housekeeping data)
- discrete and MIL-BUS TC functions as required for commandability

Operation of a wide range of rotating mechanisms in different operating conditions

- Precise Mechanism Positioning
- Continuous and discontinuous scans
- Fast mirror scan operation with discontinuous scan profiles
- Speed controlled operation
- Sophisticated mechanics and mechanism protection

Source: <http://www.jena-optronik.com>

