

SODERN ON BOARD SPOT5



For more than 20 years, SODERN develops specific subsystems and equipment for Earth observation optical payloads.

Onboard SPOT 5 satellite, SODERN is present at the heart of all optical observation instruments: "Haute Résolution Géométrique" main instrument, Vegetation Monitoring Instrument, High-Resolution Stereoscopic instrument..

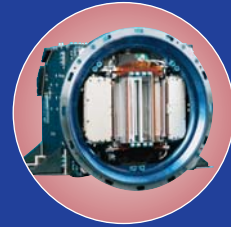
SODERN also provides attitude control equipment: Earth Sensors and Star Trackers.

On the whole, SPOT 5 CARRIES 13 UNITS designed and produced by SODERN.

SODERN is also present on board SPOT 1 to 4, HELIOS I AND II, ENVISAT, METOP... with specifically developed optical payloads subsystems and with AOCS equipment.

HRG MAIN INSTRUMENT: DTA 09 MULTISPECTRAL DETECTION UNIT

- The input beam is split in five spectral bands by the prism type spectral separator using dichroic filters and coloured glasses
- The coloured beams are focused on the detector lines
- Local analogue circuitry is arranged as close as possible to the detectors
- Panchromatic channel: 2 staggered lines of 12000 pixels to cover 60km swath with 2.5m sampling
- Multi-spectral channel: three visible and NIR 12000 pixels registered lines, a SWIR 3000 pixel registered line



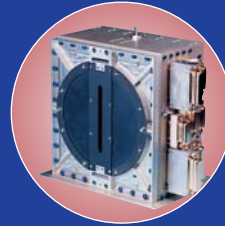
VEGETATION M I : DTA 05 CAMERAS

- Four registered cameras: one for each spectral band (visible, NIR and SWIR)
- Wide field of view (101° fov) and low distortion telecentric optics with focal plane illumination compensation
 - Detection units with 1728 detectors linear array
- Very high precision (11 bits) video processing chain
 - On board radiometric calibration device



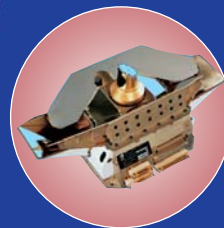
HIGH RESOLUTION STEREOSCOPIC: DTA 11 MONO-SPECTRAL DETECTION UNITS

- Two detection units: 12000 pixels, 120km swath and 5x10m pixel
 - Designed from elementary modules of HRG detection unit



STD 16: OFF-THE-SHELF LEO SCANNING EARTH SENSOR

- Refer to STD 16 data sheet



SED 16: OFF-THE-SHELF AUTONOMOUS STAR TRACKER

- Refer to SED 16 data sheet



Because of constant improvement to our product, specifications are subject to change without notice.
C04.2017 - 04.1999