Crystalspace S1U Sun sensor

**Overview**
Sun sensor measures sun angle to satellite. Our sun sensor is the lightest, smallest and most energy efficient sensor on the market. Sensor provides at least ±0.5 degree precision in whole field of view. Our sun sensor has ±45 degrees field of view in two axis, using six sensors it is possible to track sun movement around whole satellite. Sensor is fully self-contained and does not expose any sensitive analog signals for simplicity and reliability. It uses standard SPI interface for communication.

**Features**
- Mechanically easily integratable
- Radiation hardened by design
- 6 mm thick and weighs under 5 g
- Architecture flight tested on successful ESTCube-1 satellite
- Power consumption during active mode: < 20 mW
- Power consumption during sleep mode: < 9 mW
- SPI controlled
- Temperature calibrated
- System can be easily tested, controlled and calibrated with Crystalspace control application

**Available options**
- Side panels with integrated sun sensors and magnetic torquers

**Performance**
- at least ± 0.5 degree precision
- ±45 degrees field of view in two axis

**Product Properties**
- Dimensions: 26 x 26 x 6 mm
- Temperature range −25°C to 85°C
- Mass: < 5 g
- IPC-A-610 Class 3 assembly
- Vibration and shock tested
- Thermal vacuum tested