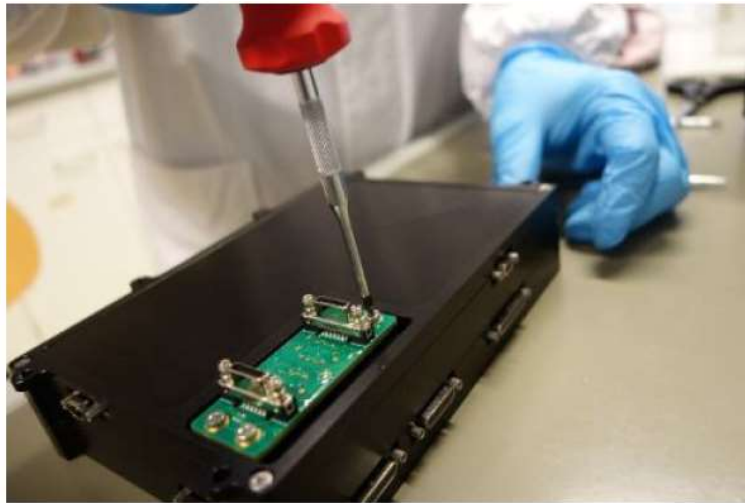
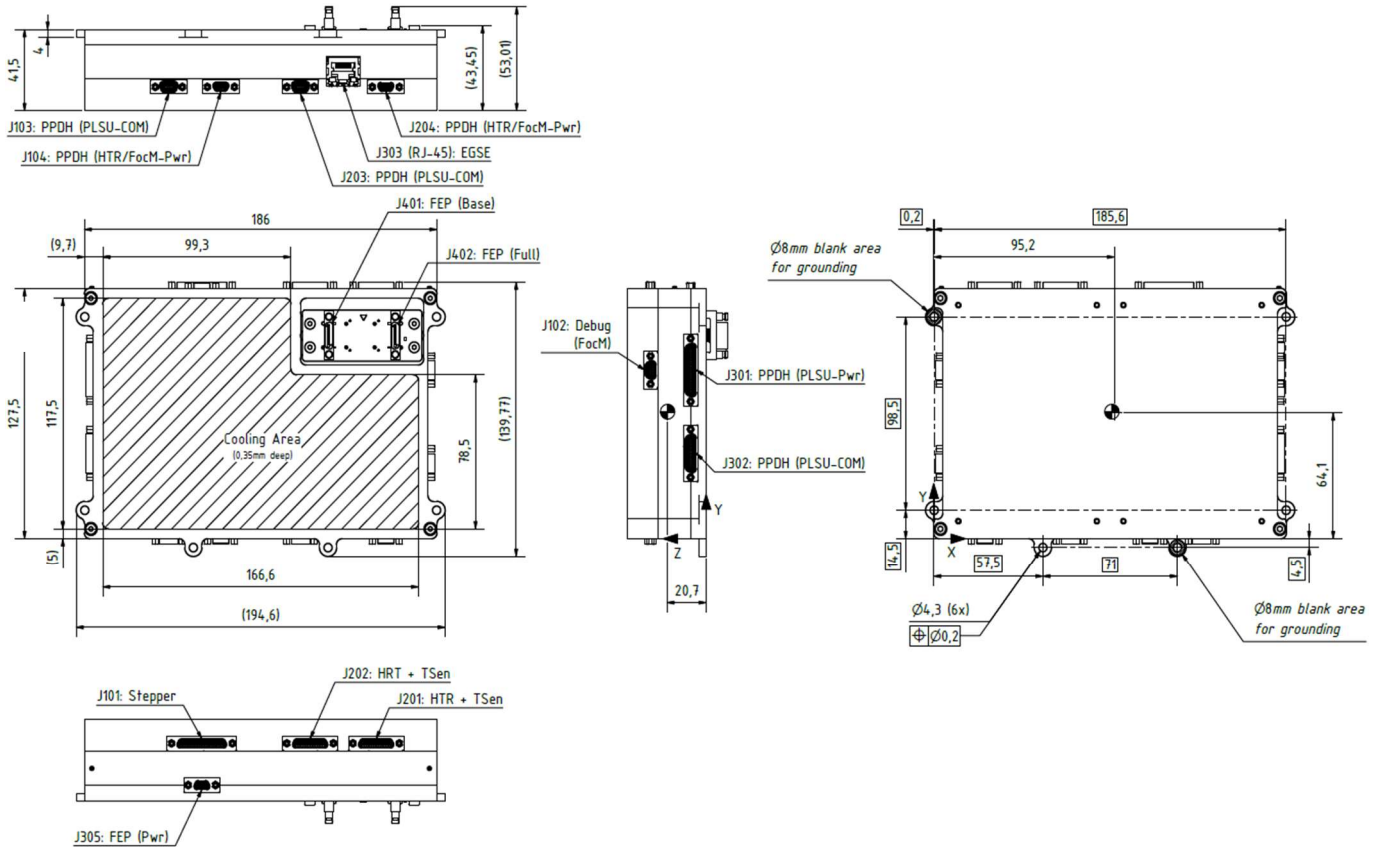


PAYLOAD SUPPORT UNIT

The Payload Support Unit (PLSU) by Berlin Space Technologies is a sophisticated electronic device that is designed to operate a payload and receive, store, process, and compress payload data. It further includes an encryption and CCSDS engine. Additional functions are to control the payload temperature (Heat) and operate a focus mechanism (FOCM).



CHARACTERISTICS	
Input from payload	Up to 10Gbit/s data input (raw) User defined interfaces (FPGA) LVDS, CameraLink, GigE, USB
Processing	User defined processing (FPGA) Radiometric & geometric image Correction dTDI (Image Stacking) JPEG(LS/2000/-) / PNG / PNM / FELICS Compression H.265 Video Compression
Storage	1TB storage size 850 MB/s write speed
Encryption	128bit AES-GCM Diffi Hellman - RSA Key 3072 bit Longer key length on request
CCSDS	CCSDS 133.1-B-2 CCSDS 355.0-B-1 CCSDS 732.0-B-3 CCSDS 131.0-B-3
Output	Up to 10Gbit/s data input (raw) User defined interfaces (FPGA) LVDS, GigE, USB



CHARACTERISTICS	
Dimensions	53.0 x 139.8 x 194.6 mm ³
Mass	985 ± 30 g
Nominal voltage	3.3 V @Data Processing Unit (DPU) 23.1 V @Heat & FOCM
Power consumption	Depending on heaters and DPU usage Average: < 8 W
Radiation Hardness	20 kRad @ Heat & FOCM 30 kRad @ DPU
Operating Temperature	-20°C to + 40°C
Design Life (LEO)	5 years