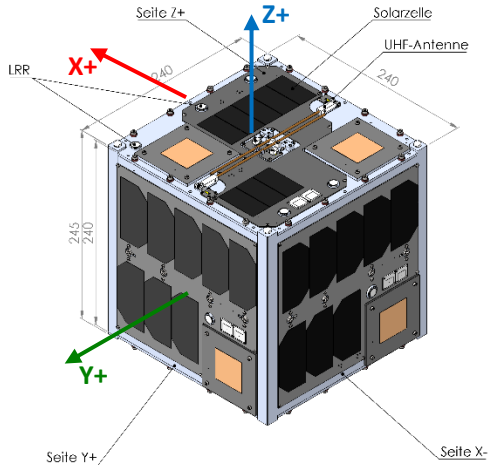
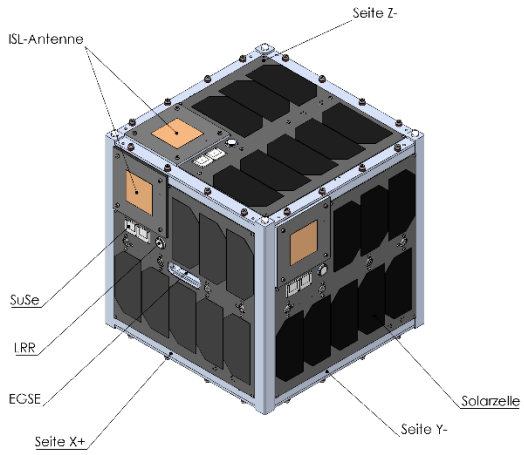
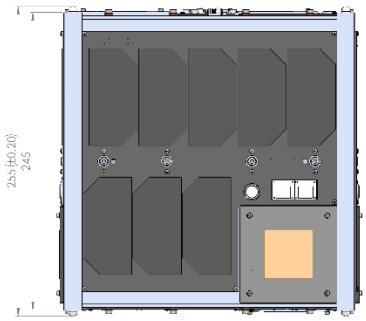
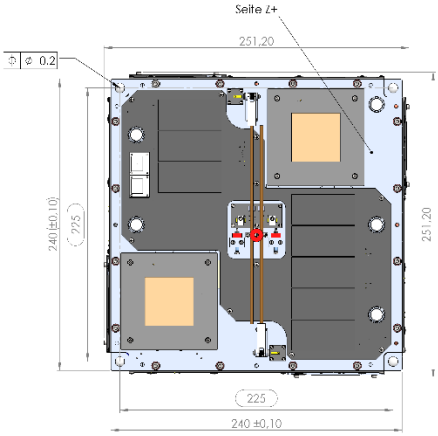
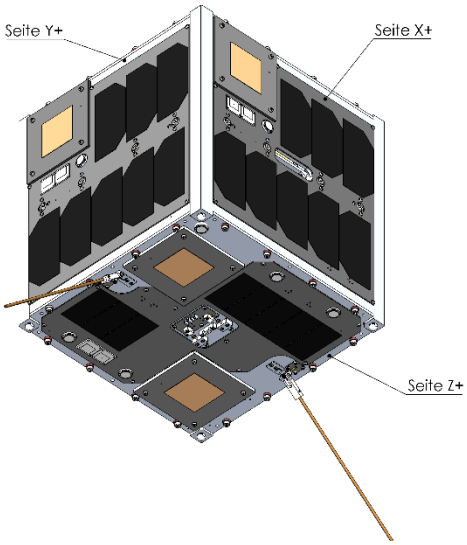
Satellite body fixed coordinate system

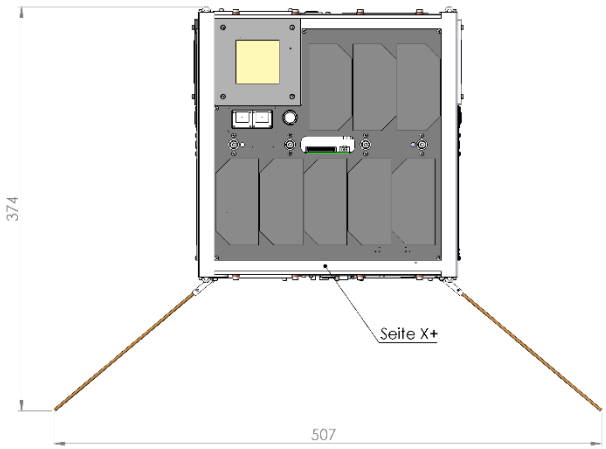




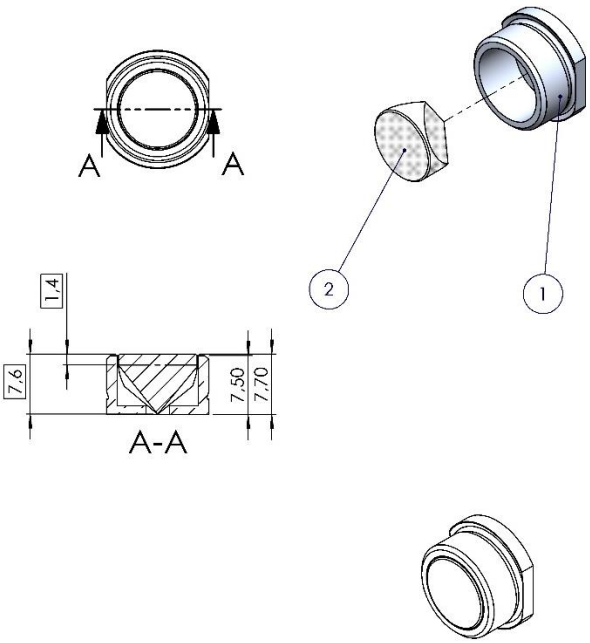






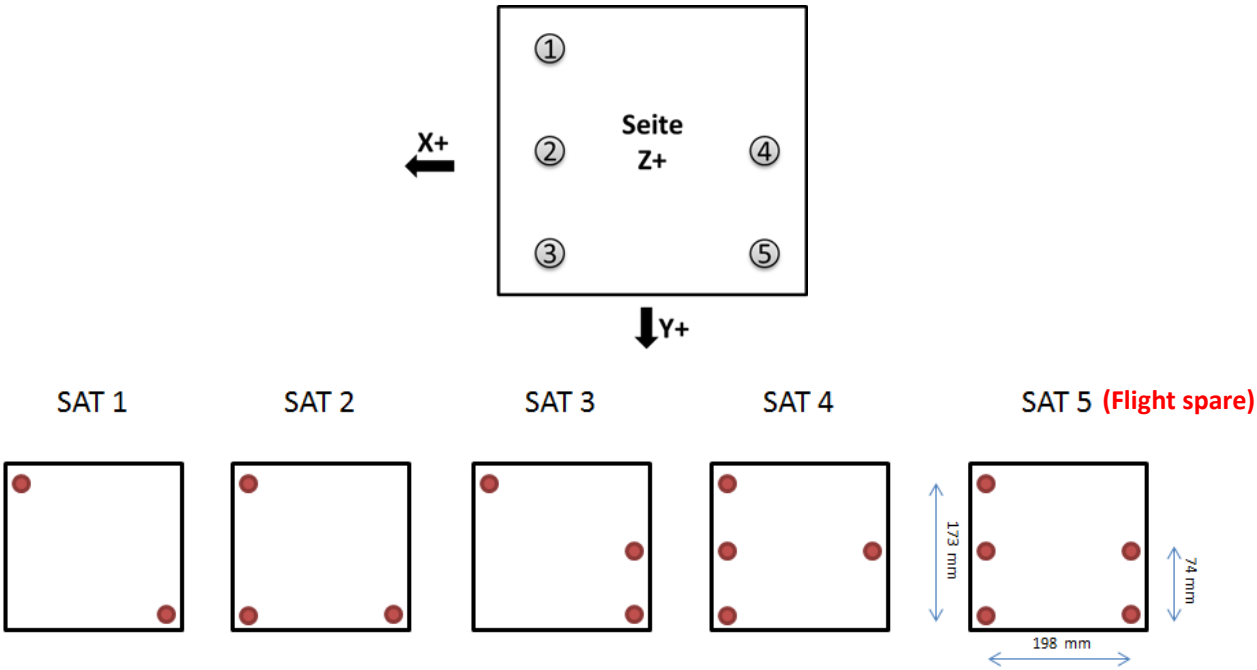


Cross section of cube in mount



Position of LRA

- Missions consists of four satellites (SAT 1, 2, 3, 4) and one flight spare (SAT5)
- **X+, X-, Y+, Y+, Z-** side of each four satellites are **identical** and is equipped with **one** reflector.
- **Z+** side of each satellite has different **pattern** to identify the satellite between each other.



Position (XYZ) of center of front face and orientation

Origin of position is the geometric reference frame.

Satellite	Cube (Satellite Position)	Cube ID	estimated peak	position (X; Y; Z)	orientation normal vector (X; Y; Z)
S-NET: A / 1	X+	FM_1	230	(122,7; 32; -25)	(1; 0; 0)
	X-	FM_2	230	(-122,7; -32; -25)	(-1; 0; 0)
	Y+	FM_3	220	(-32; 122,7; -25)	(0; 1; 0)
	Y-	FM_4	240	(32; -122,7; -25)	(0; -1; 0)
	Z+_1	FM_5	230	(99; -74; 122,7)	(0; 0; 1)
	Z+_2	N/A	N/A	(99; 0; 122,7)	(0; 0; 1)
	Z+_3	N/A	N/A	(99; 99; 122,7)	(0; 0; 1)
	Z+_4	N/A	N/A	(-99; 0; 122,7)	(0; 0; 1)
	Z+_5	FM_6	230	(-99; 74; 122,7)	(0; 0; 1)
	Z-	FM_7	235	(32; 15; -122,7)	(0; 0; -1)
S-NET: B / 2	X+	FM_8	225	(122,7; 32; -25)	(1; 0; 0)
	X-	FM_9	245	(-122,7; -32; -25)	(-1; 0; 0)
	Y+	FM_10	240	(-32; 122,7; -25)	(0; 1; 0)
	Y-	FM_11	230	(32; -122,7; -25)	(0; -1; 0)
	Z+_1	FM_12	225	(99; -74; 122,7)	(0; 0; 1)
	Z+_2	N/A	N/A	(99; 0; 122,7)	(0; 0; 1)
	Z+_3	FM_13	235	(99; 99; 122,7)	(0; 0; 1)
	Z+_4	N/A	N/A	(-99; 0; 122,7)	(0; 0; 1)
	Z+_5	FM_14	230	(-99; 74; 122,7)	(0; 0; 1)
	Z-	FM_15	235	(32; 15; -122,7)	(0; 0; -1)
S-NET: C / 3	X+	FM_16	250	(122,7; 32; -25)	(1; 0; 0)
	X-	FM_17	255	(-122,7; -32; -25)	(-1; 0; 0)
	Y+	FM_18	230	(-32; 122,7; -25)	(0; 1; 0)
	Y-	FM_19	235	(32; -122,7; -25)	(0; -1; 0)
	Z+_1	FM_20	225	(99; -74; 122,7)	(0; 0; 1)
	Z+_2	N/A	N/A	(99; 0; 122,7)	(0; 0; 1)
	Z+_3	N/A	N/A	(99; 99; 122,7)	(0; 0; 1)
	Z+_4	FM_21	230	(-99; 0; 122,7)	(0; 0; 1)

	Z+_5	FM_22	225	(-99; 74; 122,7)	(0; 0; 1)
	Z-	FM_23	220	(32; 15; -122,7)	(0; 0; -1)
S-NET: D / 4	X+	FM_24	225	(122,7; 32; -25)	(1; 0; 0)
	X-	FM_25	240	(-122,7; -32; -25)	(-1; 0; 0)
	Y+	FM_26	245	(-32; 122,7; -25)	(0; 1; 0)
	Y-	FM_27	225	(32; -122,7; -25)	(0; -1; 0)
	Z+_1	FM_28	225	(99; -74; 122,7)	(0; 0; 1)
	Z+_2	FM_29	220	(99; 0; 122,7)	(0; 0; 1)
	Z+_3	FM_30	230	(99; 99; 122,7)	(0; 0; 1)
	Z+_4	FM_31	220	(-99; 0; 122,7)	(0; 0; 1)
	Z+_5	N/A	N/A	(-99; 74; 122,7)	(0; 0; 1)
	Z-	FM_32	220	(32; 15; -122,7)	(0; 0; -1)
S-NET: E / 5 **Flight Spare**	X+	FM_33	225	(122,7; 32; -25)	(1; 0; 0)
	X-	FM_34	225	(-122,7; -32; -25)	(-1; 0; 0)
	Y+	FM_35	225	(-32; 122,7; -25)	(0; 1; 0)
	Y-	FM_36	220	(32; -122,7; -25)	(0; -1; 0)
	Z+_1	FM_37	235	(99; -74; 122,7)	(0; 0; 1)
	Z+_2	FM_38	230	(99; 0; 122,7)	(0; 0; 1)
	Z+_3	FM_39	235	(99; 99; 122,7)	(0; 0; 1)
	Z+_4	FM_40	240	(-99; 0; 122,7)	(0; 0; 1)
	Z+_5	FM_41	220	(-99; 74; 122,7)	(0; 0; 1)
	Z-	FM_42	215	(32; 15; -122,7)	(0; 0; -1)