

## **SMEI Instrument Commanding Specification**

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CMD ID	CMD MNEMONIC	Parameter#	Bits	Data Type	Min (Hex)	Max (Hex)	Default (Hex)	Units	Description
	Keep to 10 characters Fill in characters 0-9 only SM_0123456789								
00	SM_ENBL_SAFE	00	0-15	Hex	1480	1480	1480		SMEI Sub-Address 4
00	SM_ENBL_SAFE	01	0-7	Hex			0		Command Identifier
00	SM_ENBL_SAFE	01	8-15	Hex	0	FF			Sequence Identifier
00	SM_ENBL_SAFE	02	0-15	Hex	0	FFFF			CRC
00	SM_ENBL_SAFE	03-32	0-15	Hex	0	0	0		Spare (0)
01	SM_GOTO_SAFE	00		Hex	1480	1480	1480		SMEI Sub-Address 4
01	SM_GOTO_SAFE	01	0-7	Hex			1		Command Identifier
01	SM_GOTO_SAFE	01	8-15	Hex	0	FF			Sequence Identifier
01	SM_GOTO_SAFE	02		Hex	0	FFFF			CRC
01	SM_GOTO_SAFE	03-32		Hex	0	0	0		Spare (0)
02	SM_ENBL_PTCH	00		Hex	1480	1480	1480		SMEI Sub-Address 4
02	SM_ENBL_PTCH	01	0-7	Hex			2		Command Identifier
02	SM_ENBL_PTCH	01	8-15	Hex	0	FF			Sequence Identifier
02	SM_ENBL_PTCH	02		Hex	0	FFFF			CRC
02	SM_ENBL_PTCH	03-32		Hex	0	0	0		Spare (0)
03	SM_GOTO_PTCH	00		Hex	1480	1480	1480		SMEI Sub-Address 4
03	SM_GOTO_PTCH	01	0-7	Hex			3		Command Identifier
03	SM_GOTO_PTCH	01	8-15	Hex	0	FF			Sequence Identifier
03	SM_GOTO_PTCH	02		Hex	0	FFFF			CRC
03	SM_GOTO_PTCH	03-32		Hex	0	0	0		Spare (0)
05	SM_GOTO_CONF	00		Hex	1480	1480	1480		SMEI Sub-Address 4
05	SM_GOTO_CONF	01	0-7	Hex			5		Command Identifier
05	SM_GOTO_CONF	01	8-15	Hex	0	FF			Sequence Identifier
05	SM_GOTO_CONF	02		Hex	0	FFFF			CRC
05	SM_GOTO_CONF	03-32		Hex	0	0	0		Spare (0)

07	SM_GOTO_OBS	00				Hex	1480	1480	1480	SMEI Sub-Address 4
07	SM_GOTO_OBS	01	0-7		Hex			7		Command Identifier
07	SM_GOTO_OBS	01	8-15		Hex		FF			Sequence Identifier
07	SM_GOTO_OBS	02			Hex		FFFF			CRC
07	SM_GOTO_OBS	03-32			Hex		0	0		Spare (0)
08	SM_ENBL_SCNF	00								
08	SM_ENBL_SCNF	01	0-15		Hex		1480	1480	1480	SMEI Sub-Address 4
08	SM_ENBL_SCNF	01	0-7		Hex			8		Command Identifier
08	SM_ENBL_SCNF	01	8-15		Hex		FF			Sequence Identifier
08	SM_ENBL_SCNF	02	0-15		Hex		FFFF			CRC
08	SM_ENBL_SCNF	03-32	0-15		Hex		0	0		Spare (0)
09	SM_SYS_CONF	00								
09	SM_SYS_CONF	01			Hex			1480		SMEI Sub-Address 4
09	SM_SYS_CONF	01	0-7		Hex			9		Command Identifier
09	SM_SYS_CONF	01	8-15		Hex		FF			Sequence Identifier
09	SM_SYS_CONF	02			Hex		FFFF			CRC
09	SM_SYS_CONF	03			Hex		FFFF	0		Global Configuration AND mask
09	SM_SYS_CONF	04			Hex		FFFF	0		Global Configuration XOR mask
09	SM_SYS_CONF	05-32			Hex		0	0		Spare (0)
40	SM_DHU_COLD	00								
40	SM_DHU_COLD	01			Hex		1480	1480	1480	SMEI Sub-Address 4
40	SM_DHU_COLD	01	0-7		Hex			40		Command Identifier
40	SM_DHU_COLD	01	8-15		Hex		FF			Sequence Identifier
40	SM_DHU_COLD	02			Hex		FFFF			CRC
40	SM_DHU_COLD	03-32			Hex		0	0		Spare (0)
43	SM_PATCH_UPL	00								
43	SM_PATCH_UPL	01			Hex		1480	1480	1480	SMEI Sub-Address 4
43	SM_PATCH_UPL	01	0-7		Hex			43		Command Identifier
43	SM_PATCH_UPL	01	8-15		Hex		FF			Sequence Identifier
43	SM_PATCH_UPL	02			Hex		FFFF			CRC
43	SM_PATCH_UPL	03			Hex		13E3	0		Patch Buffer Offset
43	SM_PATCH_UPL	04-32			Hex		FFFF	0		Binary Patch Data (padded with 0)

44	SM_PATCH_CMT	00			Hex	1480	1480	1480	SMEI Sub-Address 4
44	SM_PATCH_CMT	01	0-7		Hex			44	Command Identifier
44	SM_PATCH_CMT	01	8-15		Hex	0	FF		Sequence Identifier
44	SM_PATCH_CMT	02			Hex	0	FFFF		CRC
44	SM_PATCH_CMT	03			Hex	0	1FEF	0	Patch Buffer Offset
44	SM_PATCH_CMT	04			Hex	0	2000		Patch Data Words
44	SM_PATCH_CMT	05			Hex	0	7F		Patch Destination Page
44	SM_PATCH_CMT	06			Hex	0	3FFF		Patch Destination Page Offset
44	SM_PATCH_CMT	07-32			Hex	0	0	0	Spare (0)
46	SM_PATCH_DEA	00			Hex	1480	1480	1480	SMEI Sub-Address 4
46	SM_PATCH_DEA	01	0-7		Hex			46	Command Identifier
46	SM_PATCH_DEA	01	8-15		Hex	0	FF		Sequence Identifier
46	SM_PATCH_DEA	02			Hex	0	FFFF		CRC
46	SM_PATCH_DEA	03-32			Hex	0	0	0	Spare (0)

47	SM_PATCH_ACT	00			Hex	1480	1480	1480	SMEI Sub-Address 4
47	SM_PATCH_ACT	01	0-7		Hex			47	Command Identifier
47	SM_PATCH_ACT	01	8-15		Hex	0	FF		Sequence Identifier
47	SM_PATCH_ACT	02			Hex	0	FFFF		CRC
47	SM_PATCH_ACT	03			Hex	0	FFFF	0	Software Image CRC
47	SM_PATCH_ACT	04-32			Hex	0	0	0	Spare (0)
48	SM_THERM_CTRL	00			Hex	1480	1480	1480	SMEI Sub-Address 4
48	SM_THERM_CTRL	01	0-7		Hex			48	Command Identifier
48	SM_THERM_CTRL	01	8-15		Hex	0	FF		Sequence Identifier
48	SM_THERM_CTRL	02			Hex	0	FFFF		CRC
48	SM_THERM_CTRL	03			Hex	0	FF	0	Camera 1 Set Temperature
48	SM_THERM_CTRL	04			Hex	0	FF	0	Camera 2 Set Temperature
48	SM_THERM_CTRL	05			Hex	0	FF	0	Camera 3 Set Temperature
48	SM_THERM_CTRL	06			Hex	0	3	1	Maximum Active Heaters
48	SM_THERM_CTRL	07-32			Hex	0	0	0	Spare(0)

51	SM_1_PWR_ON	00				Hex	1480	1480	1480	SMEI Sub-Address 4
51	SM_1_PWR_ON	01	0-7		Hex	51				Command Identifier
51	SM_1_PWR_ON	01	8-15		Hex		FF			Sequence Identifier
51	SM_1_PWR_ON	02			Hex		FFFF			CRC
51	SM_1_PWR_ON	03-32			Hex	0	0	0		Spare (0)
52	SM_1_ICE_OFF	00			Hex	1480	1480	1480		SMEI Sub-Address 4
52	SM_1_ICE_OFF	01	0-7		Hex			52		Command Identifier
52	SM_1_ICE_OFF	01	8-15		Hex	0	FF			Sequence Identifier
52	SM_1_ICE_OFF	02			Hex	0	FFFF			CRC
52	SM_1_ICE_OFF	03-32			Hex	0	0	0		Spare (0)
53	SM_1_ICE_ON	00			Hex	1480	1480	1480		SMEI Sub-Address 4
53	SM_1_ICE_ON	01	0-7		Hex			53		Command Identifier
53	SM_1_ICE_ON	01	8-15		Hex	0	FF			Sequence Identifier
53	SM_1_ICE_ON	02			Hex	0	FFFF			CRC
53	SM_1_ICE_ON	03			Hex	0	FF			Target Temperature
53	SM_1_ICE_ON	04			Hex	0	FFFF		Minutes	Duration
53	SM_1_ICE_ON	05-32			Hex	0	0	0		Spare (0)
54	SM_1_HOP_EN	00			Hex	1480	1480	1480		SMEI Sub-Address 4
54	SM_1_HOP_EN	01	0-7		Hex			54		Command Identifier
54	SM_1_HOP_EN	01	8-15		Hex	0	FF			Sequence Identifier
54	SM_1_HOP_EN	02			Hex	0	FFFF			CRC
54	SM_1_HOP_EN	03-32			Hex	0	0	0		Spare (0)
55	SM_1_HOP_TEST	00			Hex	1480	1480	1480		SMEI Sub-Address 4
55	SM_1_HOP_TEST	01	0-7		Hex			55		Command Identifier
55	SM_1_HOP_TEST	01	8-15		Hex	0	FF			Sequence Identifier
55	SM_1_HOP_TEST	02			Hex	0	FFFF			CRC
55	SM_1_HOP_TEST	03-32			Hex	0	0	0		Spare (0)

57	SM_1_HOP_ACT	00			Hex	1480	1480	1480	SMEI Sub-Address 4
57	SM_1_HOP_ACT	01	0-7		Hex			57	Command Identifier
57	SM_1_HOP_ACT	01	8-15		Hex	0	FF		Sequence Identifier
57	SM_1_HOP_ACT	02			Hex	0	FFFF		CRC
57	SM_1_HOP_ACT	03			Hex	0	FFFF	0	Duration (max)
57	SM_1_HOP_ACT	04-32			Hex	0	0	0	Spare (0)
59	SM_1_CONF	00			Hex	1480	1480	1480	SMEI Sub-Address 4
59	SM_1_CONF	01	0-7		Hex			59	Command Identifier
59	SM_1_CONF	01	8-15		Hex	0	FF		Sequence Identifier
59	SM_1_CONF	02			Hex	0	FFFF		CRC
59	SM_1_CONF	03			Hex	0	20	0	Configuration Number
59	SM_1_CONF	04-32			Hex	0	0	0	Spare (0)

5B	SM_1_DYN_CONF	00				1480	1480	1480	1480	SMEI Sub-Address 4
5B	SM_1_DYN_CONF	01	0-7	Hex	Hex			5B		Command Identifier
5B	SM_1_DYN_CONF	01	8-15	Hex	Hex	0	FF			Sequence Identifier
5B	SM_1_DYN_CONF	02		Hex	Hex	0	FFFF			CRC
5B	SM_1_DYN_CONF	03		Hex	Hex	0	0			Spare (0)
5B	SM_1_DYN_CONF	04		Hex	Hex	0	0			Spare (0)
5B	SM_1_DYN_CONF	05		Hex	Hex	0	FFFF			See Obs Mode H/K Word 4
5B	SM_1_DYN_CONF	06		Hex	Hex	0	FFFF			See Obs Mode H/K Word 5
5B	SM_1_DYN_CONF	07		Hex	Hex	0	FFFF			See Obs Mode H/K Word 6
5B	SM_1_DYN_CONF	08		Hex	Hex	0	FFFF			See Obs Mode H/K Word 7
5B	SM_1_DYN_CONF	09		Hex	Hex	0	FFFF			See Obs Mode H/K Word 8
5B	SM_1_DYN_CONF	10		Hex	Hex	0	FFFF			See Obs Mode H/K Word 9
5B	SM_1_DYN_CONF	11		Hex	Hex	0	FFFF			See Obs Mode H/K Word 10
5B	SM_1_DYN_CONF	12		Hex	Hex	0	FFFF			See Obs Mode H/K Word 11
5B	SM_1_DYN_CONF	13		Hex	Hex	0	FFFF			See Obs Mode H/K Word 12
5B	SM_1_DYN_CONF	14		Hex	Hex	0	FFFF			See Obs Mode H/K Word 13
5B	SM_1_DYN_CONF	15		Hex	Hex	0	0			Spare (0)
5B	SM_1_DYN_CONF	16		Hex	Hex	0	0			Spare (0)
5B	SM_1_DYN_CONF	17		Hex	Hex	0	0			Spare (0)
5B	SM_1_DYN_CONF	18		Hex	Hex	0	0			Spare (0)
5B	SM_1_DYN_CONF	19		Hex	Hex	0	0			Spare (0)
5B	SM_1_DYN_CONF	20		Hex	Hex	0	0			Spare (0)
5B	SM_1_DYN_CONF	21		Hex	Hex	0	0			Spare (0)
5B	SM_1_DYN_CONF	22		Hex	Hex	0	0			Spare (0)
5B	SM_1_DYN_CONF	23		Hex	Hex	0	0			Spare (0)
5B	SM_1_DYN_CONF	24		Hex	Hex	0	0			Spare (0)
5B	SM_1_DYN_CONF	25		Hex	Hex	0	0			Spare (0)
5B	SM_1_DYN_CONF	26		Hex	Hex	0	0			Spare (0)
5B	SM_1_DYN_CONF	27		Hex	Hex	0	0			Spare (0)
5B	SM_1_DYN_CONF	28		Hex	Hex	0	0			Spare (0)
5B	SM_1_DYN_CONF	29		Hex	Hex	0	0			Spare (0)
5B	SM_1_DYN_CONF	30		Hex	Hex	0	0			Spare (0)
5B	SM_1_DYN_CONF	31		Hex	Hex	0	0			Spare (0)
5B	SM_1_DYN_CONF	32		Hex	Hex	0	0			Spare (0)

5D	SM_1_MOTOR	00				Hex	1480	1480	1480		SMEI Sub-Address 4
5D	SM_1_MOTOR	01	0-7		Hex	Hex		5D			Command Identifier
5D	SM_1_MOTOR	01	8-15		Hex	Hex	0	FF			Sequence Identifier
5D	SM_1_MOTOR	02			Hex	Hex	0	FFFF			CRC
5D	SM_1_MOTOR	03			Hex	Hex	0	3			Coil
5D	SM_1_MOTOR	04			Hex	Hex	0	000F	4	Seconds	Duration
5D	SM_1_MOTOR	05-32			Hex	Hex	0	0	0		Spare (0)
61	SM_2_PWR_ON	00									
61	SM_2_PWR_ON	01	0-7		Hex	Hex	1480	1480	1480		SMEI Sub-Address 4
61	SM_2_PWR_ON	01	8-15		Hex	Hex	0	FF	61		Command Identifier
61	SM_2_PWR_ON	02			Hex	Hex	0	FFFF			Sequence Identifier
61	SM_2_PWR_ON	03-32			Hex	Hex	0	0	0		CRC
											Spare (0)
62	SM_2_ICE_OFF	00									
62	SM_2_ICE_OFF	01	0-7		Hex	Hex	1480	1480	1480		SMEI Sub-Address 4
62	SM_2_ICE_OFF	01	8-15		Hex	Hex	0	FF	62		Command Identifier
62	SM_2_ICE_OFF	02			Hex	Hex	0	FFFF			Sequence Identifier
62	SM_2_ICE_OFF	03-32			Hex	Hex	0	0	0		CRC
											Spare (0)
63	SM_2_ICE_ON	00									
63	SM_2_ICE_ON	01	0-7		Hex	Hex	1480	1480	1480		SMEI Sub-Address 4
63	SM_2_ICE_ON	01	8-15		Hex	Hex	0	FF	63		Command Identifier
63	SM_2_ICE_ON	02			Hex	Hex	0	FFFF			Sequence Identifier
63	SM_2_ICE_ON	03			Hex	Hex	0	FF			CRC
63	SM_2_ICE_ON	04			Hex	Hex	0	FFFF		Minutes	Target Temperature
63	SM_2_ICE_ON	05-32			Hex	Hex	0	0	0		Duration
											Spare (0)
64	SM_2_HOP_EN	00									
64	SM_2_HOP_EN	01	0-7		Hex	Hex	1480	1480	1480		SMEI Sub-Address 4
64	SM_2_HOP_EN	01	8-15		Hex	Hex	0	FF	64		Command Identifier
64	SM_2_HOP_EN	02			Hex	Hex	0	FFFF			Sequence Identifier
64	SM_2_HOP_EN	03-32			Hex	Hex	0	0	0		CRC
											Spare (0)
65	SM_2_HOP_TEST	00									
					Hex	Hex	1480	1480	1480		SMEI Sub-Address 4



65	SM_2_HOP_TEST	01	0-7	Hex								Command Identifier
65	SM_2_HOP_TEST	01	8-15	Hex	0	FF					65	Sequence Identifier
65	SM_2_HOP_TEST	02		Hex	0	FFFF						CRC
65	SM_2_HOP_TEST	03-32		Hex	0	0					0	Spare (0)
67	SM_2_HOP_ACT	00		Hex	1480	1480						SMEI Sub-Address 4
67	SM_2_HOP_ACT	01	0-7	Hex							67	Command Identifier
67	SM_2_HOP_ACT	01	8-15	Hex	0	FF						Sequence Identifier
67	SM_2_HOP_ACT	02		Hex	0	FFFF						CRC
67	SM_2_HOP_ACT	03		Hex	0	FFFF					Seconds	Duration
67	SM_2_HOP_ACT	04-32		Hex	0	0					0	Spare (0)
69	SM_2_CONF	00		Hex	1480	1480						SMEI Sub-Address 4
69	SM_2_CONF	01	0-7	Hex							69	Command Identifier
69	SM_2_CONF	01	8-15	Hex	0	FF						Sequence Identifier
69	SM_2_CONF	02		Hex	0	FFFF						CRC
69	SM_2_CONF	03		Hex	0	20					0	Configuration Number
69	SM_2_CONF	04-32		Hex	0	0					0	Spare (0)

6B	SM_2_DYN_CONF	00				Hex	1480	1480	1480	1480	SMEI Sub-Address 4
6B	SM_2_DYN_CONF	01	0-7		Hex	Hex			6B		Command Identifier
6B	SM_2_DYN_CONF	01	8-15		Hex	Hex	0	FF			Sequence Identifier
6B	SM_2_DYN_CONF	02			Hex	Hex	0	FFFF			CRC
6B	SM_2_DYN_CONF	03			Hex	Hex	0	0			Spare (0)
6B	SM_2_DYN_CONF	04			Hex	Hex	0	0			Spare (0)
6B	SM_2_DYN_CONF	05			Hex	Hex	0	FFFF			See Obs Mode H/K Word 4
6B	SM_2_DYN_CONF	06			Hex	Hex	0	FFFF			See Obs Mode H/K Word 5
6B	SM_2_DYN_CONF	07			Hex	Hex	0	FFFF			See Obs Mode H/K Word 6
6B	SM_2_DYN_CONF	08			Hex	Hex	0	FFFF			See Obs Mode H/K Word 7
6B	SM_2_DYN_CONF	09			Hex	Hex	0	FFFF			See Obs Mode H/K Word 8
6B	SM_2_DYN_CONF	10			Hex	Hex	0	FFFF			See Obs Mode H/K Word 9
6B	SM_2_DYN_CONF	11			Hex	Hex	0	FFFF			See Obs Mode H/K Word 10
6B	SM_2_DYN_CONF	12			Hex	Hex	0	FFFF			See Obs Mode H/K Word 11
6B	SM_2_DYN_CONF	13			Hex	Hex	0	FFFF			See Obs Mode H/K Word 12
6B	SM_2_DYN_CONF	14			Hex	Hex	0	FFFF			See Obs Mode H/K Word 13
6B	SM_2_DYN_CONF	15			Hex	Hex	0	0			Spare (0)
6B	SM_2_DYN_CONF	16			Hex	Hex	0	0			Spare (0)
6B	SM_2_DYN_CONF	17			Hex	Hex	0	0			Spare (0)
6B	SM_2_DYN_CONF	18			Hex	Hex	0	0			Spare (0)
6B	SM_2_DYN_CONF	19			Hex	Hex	0	0			Spare (0)
6B	SM_2_DYN_CONF	20			Hex	Hex	0	0			Spare (0)
6B	SM_2_DYN_CONF	21			Hex	Hex	0	0			Spare (0)
6B	SM_2_DYN_CONF	22			Hex	Hex	0	0			Spare (0)
6B	SM_2_DYN_CONF	23			Hex	Hex	0	0			Spare (0)
6B	SM_2_DYN_CONF	24			Hex	Hex	0	0			Spare (0)
6B	SM_2_DYN_CONF	25			Hex	Hex	0	0			Spare (0)
6B	SM_2_DYN_CONF	26			Hex	Hex	0	0			Spare (0)
6B	SM_2_DYN_CONF	27			Hex	Hex	0	0			Spare (0)
6B	SM_2_DYN_CONF	28			Hex	Hex	0	0			Spare (0)
6B	SM_2_DYN_CONF	29			Hex	Hex	0	0			Spare (0)
6B	SM_2_DYN_CONF	30			Hex	Hex	0	0			Spare (0)
6B	SM_2_DYN_CONF	31			Hex	Hex	0	0			Spare (0)
6B	SM_2_DYN_CONF	32			Hex	Hex	0	0			Spare (0)

6D	SM_2_MOTOR	00				Hex	1480	1480	1480	1480		SMEI Sub-Address 4
6D	SM_2_MOTOR	01	0-7		Hex	Hex			6D			Command Identifier
6D	SM_2_MOTOR	01	8-15		Hex	Hex	0	FF				Sequence Identifier
6D	SM_2_MOTOR	02			Hex	Hex	0	FFFF				CRC
6D	SM_2_MOTOR	03			Hex	Hex	0	3				Coil
6D	SM_2_MOTOR	04			Hex	Hex	0	F	4	Seconds		Duration
6D	SM_2_MOTOR	05-32			Hex	Hex	0	0	0			Spare (0)
71	SM_3_PWR_ON	00			Hex	Hex	1480	1480	1480			SMEI Sub-Address 4
71	SM_3_PWR_ON	01	0-7		Hex	Hex			71			Command Identifier
71	SM_3_PWR_ON	01	8-15		Hex	Hex	0	FF				Sequence Identifier
71	SM_3_PWR_ON	02			Hex	Hex	0	FFFF				CRC
71	SM_3_PWR_ON	03-32			Hex	Hex	0	0	0			Spare (0)
72	SM_3_ICE_OFF	00			Hex	Hex	1480	1480	1480			SMEI Sub-Address 4
72	SM_3_ICE_OFF	01	0-7		Hex	Hex			72			Command Identifier
72	SM_3_ICE_OFF	01	8-15		Hex	Hex	0	FF				Sequence Identifier
72	SM_3_ICE_OFF	02			Hex	Hex	0	FFFF				CRC
72	SM_3_ICE_OFF	03-32			Hex	Hex	0	0	0			Spare (0)
73	SM_3_ICE_ON	00			Hex	Hex	1480	1480	1480			SMEI Sub-Address 4
73	SM_3_ICE_ON	01	0-7		Hex	Hex			73			Command Identifier
73	SM_3_ICE_ON	01	8-15		Hex	Hex	0	FF				Sequence Identifier
73	SM_3_ICE_ON	02			Hex	Hex	0	FFFF				CRC
73	SM_3_ICE_ON	03			Hex	Hex	0	FF				Target Temperature
73	SM_3_ICE_ON	04			Hex	Hex	0	FFFF		Minutes		Duration
73	SM_3_ICE_ON	05-32			Hex	Hex	0	0	0			Spare (0)
74	SM_3_HOP_EN	00			Hex	Hex	1480	1480	1480			SMEI Sub-Address 4
74	SM_3_HOP_EN	01	0-7		Hex	Hex			74			Command Identifier
74	SM_3_HOP_EN	01	8-15		Hex	Hex	0	FF				Sequence Identifier
74	SM_3_HOP_EN	02			Hex	Hex	0	FFFF				CRC
74	SM_3_HOP_EN	03-32			Hex	Hex	0	0	0			Spare (0)
75	SM_3_HOP_TEST	00			Hex	Hex	1480	1480	1480			SMEI Sub-Address 4

75	SM_3_HOP_TEST	01	0-7	Hex								Command Identifier
75	SM_3_HOP_TEST	01	8-15	Hex	0	FF					75	Sequence Identifier
75	SM_3_HOP_TEST	02		Hex	0	FFFF						CRC
75	SM_3_HOP_TEST	03-32		Hex	0	0					0	Spare (0)
77	SM_3_HOP_ACT	00		Hex	1480	1480						SMEI Sub-Address 4
77	SM_3_HOP_ACT	01	0-7	Hex							77	Command Identifier
77	SM_3_HOP_ACT	01	8-15	Hex	0	FF						Sequence Identifier
77	SM_3_HOP_ACT	02		Hex	0	FFFF						CRC
77	SM_3_HOP_ACT	03		Hex	0	FFFF						Duration
77	SM_3_HOP_ACT	04-32		Hex	0	0					0	Spare (0)
79	SM_3_CONF	00		Hex	1480	1480						SMEI Sub-Address 4
79	SM_3_CONF	01	0-7	Hex							79	Command Identifier
79	SM_3_CONF	01	8-15	Hex	0	FF						Sequence Identifier
79	SM_3_CONF	02		Hex	0	FFFF						CRC
79	SM_3_CONF	03		Hex	0	20					0	Configuration Number
79	SM_3_CONF	04-32		Hex	0	0					0	Spare (0)

7B	SM_3_DYN_CONF	00				1480	1480	1480	1480	SMEI Sub-Address 4
7B	SM_3_DYN_CONF	01	0-7	Hex					7B	Command Identifier
7B	SM_3_DYN_CONF	01	8-15	Hex	0	FF				Sequence Identifier
7B	SM_3_DYN_CONF	02		Hex	0	FFFF				CRC
7B	SM_3_DYN_CONF	03		Hex	0	0				Spare (0)
7B	SM_3_DYN_CONF	04		Hex	0	0				Spare (0)
7B	SM_3_DYN_CONF	05		Hex	0	FFFF				See Obs Mode H/K Word 4
7B	SM_3_DYN_CONF	06		Hex	0	FFFF				See Obs Mode H/K Word 5
7B	SM_3_DYN_CONF	07		Hex	0	FFFF				See Obs Mode H/K Word 6
7B	SM_3_DYN_CONF	08		Hex	0	FFFF				See Obs Mode H/K Word 7
7B	SM_3_DYN_CONF	09		Hex	0	FFFF				See Obs Mode H/K Word 8
7B	SM_3_DYN_CONF	10		Hex	0	FFFF				See Obs Mode H/K Word 9
7B	SM_3_DYN_CONF	11		Hex	0	FFFF				See Obs Mode H/K Word 10
7B	SM_3_DYN_CONF	12		Hex	0	FFFF				See Obs Mode H/K Word 11
7B	SM_3_DYN_CONF	13		Hex	0	FFFF				See Obs Mode H/K Word 12
7B	SM_3_DYN_CONF	14		Hex	0	FFFF				See Obs Mode H/K Word 13
7B	SM_3_DYN_CONF	15		Hex	0	0				Spare (0)
7B	SM_3_DYN_CONF	16		Hex	0	0				Spare (0)
7B	SM_3_DYN_CONF	17		Hex	0	0				Spare (0)
7B	SM_3_DYN_CONF	18		Hex	0	0				Spare (0)
7B	SM_3_DYN_CONF	19		Hex	0	0				Spare (0)
7B	SM_3_DYN_CONF	20		Hex	0	0				Spare (0)
7B	SM_3_DYN_CONF	21		Hex	0	0				Spare (0)
7B	SM_3_DYN_CONF	22		Hex	0	0				Spare (0)
7B	SM_3_DYN_CONF	23		Hex	0	0				Spare (0)
7B	SM_3_DYN_CONF	24		Hex	0	0				Spare (0)
7B	SM_3_DYN_CONF	25		Hex	0	0				Spare (0)
7B	SM_3_DYN_CONF	26		Hex	0	0				Spare (0)
7B	SM_3_DYN_CONF	27		Hex	0	0				Spare (0)
7B	SM_3_DYN_CONF	28		Hex	0	0				Spare (0)
7B	SM_3_DYN_CONF	29		Hex	0	0				Spare (0)
7B	SM_3_DYN_CONF	30		Hex	0	0				Spare (0)
7B	SM_3_DYN_CONF	31		Hex	0	0				Spare (0)
7B	SM_3_DYN_CONF	32		Hex	0	0				Spare (0)

7D	SM_3_MOTOR	00			Hex	1480	1480	1480		SMEI Sub-Address 4
7D	SM_3_MOTOR	01	0-7		Hex			7D		Command Identifier
7D	SM_3_MOTOR	01	8-15		Hex	0	FF			Sequence Identifier
7D	SM_3_MOTOR	02			Hex	0	FFFF			CRC
7D	SM_3_MOTOR	03			Hex	0	3			Coil
7D	SM_3_MOTOR	04			Hex	0	F	4	Seconds	Duration
7D	SM_3_MOTOR	05-32			Hex	0	0	0		Spare (0)

CMD ID	CMD MNEMONIC	Parameter#	Bits	Data Type	Min	Max	Default	Units	Description
	Keep to 10 characters Fill in characters 0-9 only								
	SM_0123456789								
0E	SM_EMERG_SAFE	00	0-15	Hex	14A0	14A0	14A0		SMEI Sub-Address 5
0E	SM_EMERG_SAFE	01	0-7	Hex	0E	0E	0E		Command Identifier
0E	SM_EMERG_SAFE	01	8-15	Hex	FF	FF	FF		Sequence Identifier
0E	SM_EMERG_SAFE	02	0-15	Hex	0	FFFF	3859		CRC
0E	SM_EMERG_SAFE	03	0-15	Hex	C369	C369	C369		Verification Code
0E	SM_EMERG_SAFE	04-32	0-15	Hex	0	0	0		Spare (0)

CMD ID	CMD MNEMONIC	Parameter#	Bits	Data Type	Min	Max	Default	Units	Description
	Keep to 10 characters Fill in characters 0-9 only								
	SM_0123456789								
*	SM_SC_ATT	00	0-15	Hex	14C0	14C0	14C0		SMEI Sub-Address 6
	SM_SC_ATT	01	0-15	Hex					Packet Identifiers
	SM_SC_ATT	02	0-15	Hex	0	FFFF			CRC
	SM_SC_ATT	03	0-15	Hex	0	FFFF		Seconds	UTC Seconds (MSW)
	SM_SC_ATT	04	0-15	Hex	0	FFFF		Seconds	UTC Seconds (LSW)
	SM_SC_ATT	05	0-15	Hex	0	FFFF			UTC Subseconds
	SM_SC_ATT	06-32	0-15	Hex	0	FFFF			Attitude Data (ICD Figure C6.3)

\* Not really a SMEI command. Here for completeness