Updated: 2012-12-11

SAMS Sensors on ISS

					Cable		
CH	**SAMS Sensor**	**SAMS EE**	**EE location**	**Sensor Location**	**S/N**	**B/N**	**length (in.)**
A	SE F02	EE-F05	ER2 (embedded)	MSG rack seat track	EA12303-01	000029L	186
B	SE F03	RTS/D1 (EE-F02)	ER1 Drawer 1	lower Z Panel assembly below ER2	EA12304-01	000027L	85
A	SE F04	RTS/D1 (EE-F02)	ER1 Drawer1	lower Z Panel assembly below ER1	EA12305-01	000028L	44
A	SE F05	RTS/D2 (EE-F03)	ER4 Drawer 2	Inside RTS/D2 - Active	na	na	na
A	SE F08	EE-F04	ER3 (embedded)	On seat track of ER3	EA12324-01	000041L	42

SAMS Sensor	**Sensor Location**		
TSH-ES 05	CIR		
TSH-ES 06	FIR		

SAMS EE	**EE Location**	
EE-F01	ER7(embedded)	
EE-F02	ER1 Drawer 1	
EE-F03	ER4 Drawer 2	
EE-F04	ER3 (embedded)	
EE-F05	ER2 (embedded)	
EE-F06	Stowed	Spare
EE-F07	ER8(embedded)	

Rack Locations

ER1	LAB1O2	US Lab
ER2	LAB1O1	US Lab
ER3	COL1A1	COF
ER4	JPM1F5	JEM
ER7	LAB1P2	US Lab
ER8	LAB1P4	US Lab
MSG	LAB1S2	US Lab
CIR	LAB1S3	US Lab
FIR	LAB1S4	US Lab

Flight GENERIC Version:1
Date: 01/19/12

RACK RESPONSE: R

USL - ER1 MAIN

GMT: 024:16:04:14
Filename: ER1_HS_MAIN

S-BAND AOS F | Ku-BAND AOS

Rack Power/Comm Parameters

Subsystem Power Performance

CH	Subsystem	Power	Fault	Current (AMPS)
0	DC-DC 1			0.390 d
1	DC-DC 2			0.592 d
2	RIC			0.451 d
3	Spare			0.000 d
4	PEHB			0.003 d
5	AAA Fan			0.826
6	FDS			0.000 d
7	DC-DC 3			0.416 d
8	Laptop			0.152 d
9	EMU (Failed)			0.000 d
10	AFC-1			0.633 d
11	AFC-2			0.062 d
12	AFC-3			0.029 d
13	Spare			0.003 d

Rack H&S Cycle Counter: 4381 d

Boot Load H&S Cycle Counter: R

ELC APPLIC COMM ACTIVE

LAPTOP ALIVE INDICATOR

Ground CMD Received: 1 d

Supply Current (AMPS): 4.52 d

SSPCM BUILT IN TEST

Input/Output	Relay DC/DC
Subrack 1553	RIC Timeout
Slave Card 1	Microcontroller
Slave Card 2	EEPROM Checksum
Slave Card 3	DC-DC CON 1
Slave Card 4	DC-DC CON 2
Slave Card 5	DC-DC CON 3
Slave Card 6	Non-Volatile Write
Slave Card 7	Processor Reset
Slave Card 8	1553 Parity Error

Payload Power Performance

CH	Subsystem	Power	Fault	Current (AMPS)	PLD Comm Active 422	PLD Comm Active ETH
14	Locker 1			1.406 d		
15	Locker 2			0.000 d		
16	Locker 5			0.000 d		
17	Locker 6			0.000 d		
18	Locker 3			2.543 d		
19	Locker 4			0.287 d		
20	Locker 7			0.006 d		
21	Locker 8			0.000 d		
22	Drawer 1			0.521 d		
23	Drawer 2			0.680 d		

Watchdog Enabled

Master Trips

- UnderVolt Recovery Occured
- Fault
- Close Reject
- Under Voltage
- Over Current

Heartbeat

MCC: 13 d SERC: 5 d

HRLC: 15 d S1553: 15 d

HS PLMDM Polling Active	HS PLMDM Data Active	HS PLMDM Data Stale
BL PLMDM Polling Active	BL PLMDM Data Active	BL PLMDM Data Stale

INITIAL | STANDBY | OPERATION | SHUTDOWN

A1 Upper Control Panel A2

LOCKER 1 CGBA 4 — 62256 d | 0 — POL ACT ETH

LOCKER 5

LOCKER 2

LOCKER 6 MERLIN 3 — TEMP R — R | R — POL ACT ETH

F1 Lower Control Panel F2

LOCKER 3 MAMS — 37263 d — POL ACT ETH

LOCKER 7 NANO RACK 2

LOCKER 4 MAMS/2

LOCKER 8 CTP

SAMS RTS/D1 — 32128 d | 0 — POL ACT ETH

SAMS ICU — 32281 d | 0 — POL ACT ETH

M1 Utility Drawer M2

B1 B2 D1 D2 G1 G2 J1 J2 L1 L2

LRL Enabled | MRL Enabled | HRL Enabled

1 d CTR 56560 d CTR 1 d

LABO2 SUBSYSTEM PARAMETERS

FIRE DETECTION & SUPPRESSION (FDS)

FDS Monitor Active | Smoke Detector Failed | FDS Verified Fire

Scatter: 0.51 d

Obscuration: 6.81 d

EPS RPC

TRIP

MAIN J1 A30 RPC-2 (2A/3B)

SAFING J2 A34 RPC-3 (1A/4A)

RPS Position ON | RPS Existence Present | RPS Monitor Active

VES RIV

FAIL OP CL IN TRANS

ENABLED

INHIBITED

TCS RFCA

POWERED

STARTED

TEMP SENSOR: 25.16 S

FLOW METER

CA 41.67 d

HR c

LR 41.11 d

Rack TCS Parameters

(Deg C)		TCS Temperature Sensors
27.15	TS 01	RIC Upstream
27.98	TS 02	RIC Downstream
28.54	TS 03	SSPCM Upstream
28.71	TS 04	SSPCM Downstream
23.26	TS 05	EMU (Sensor Invalid)
24.49	TS 06	PEHB
18.38	TS 07	Rack Coolant Supply (Laptop TS 08)
25.12	TS 08	Rack Coolant Return (Laptop TS 07)
18.67	TS 09	AAA Coolant Supply
23.26	TS 10	AAA Coolant Return
22.44	TS 11	Payload 1 UCP Coolant Return
22.24	TS 12	Payload 2 LCP Coolant Return
23.05	TS 13	Coldplate Inlet
22.50	TS 14	AAA Inlet - Lower Right Quadrant
22.09	TS 15	AAA Inlet - Upper Right Quadrant
22.14	TS 16	AAA Inlet - Upper Left Quadrant
25.07	TS 17	AAA Inlet - Lower Left Quad (Sensor Invalid)
19.80	TS 18	AAA Outlet - Right Side
22.95	TS 19	AAA Drawer Inlet - Center Slide Guide
25.38	TS 20	Rack Bulk Air
33.00 d		RIC Internal Temp

(Kg/Hr)		TCS Flow Meter	Set Counts
45.40	FM 1	Rack Subsystem Flow	216 d
0.00 d	FM 2	Payload Leg 1 Flow	0 d
0.00 d	FM 3	Payload Leg 2 Flow	0 d

Thermal Mode

Th Control Enabled | Valve Moving | Valve Inhibited

Thermal Sensor Warnings

Sensor 1 | Sensor 2

AAA Fan Speed Set

LAB2 MDM (RPM): 43390 d

Actual (RPM): 43590

Set Counts: 134 d

Fan Enabled: 1 | 2