

Transport of
UTTPS (*to final destination*)
and
test equipment (*temporary export*)
from Aachen (Germany)
to Wallops (USA)
(*and back*)

Address of dispatch:

I. Physikalisches Institut B

RWTH Aachen

Halle Physik, Tor 2

Otto-Blumenthal-Str.

52074 Aachen

Germany

Contact: Georg Schwering, +49-241-8027202,

Georg.Schwering@physik.rwth-aachen.de

Shipping address:

NASA Wallops Flight Facility

34200 Fulton Street, Bldg F-19

Wallops Island, VA 23337

USA

Contact: Samuel Thompson X1534 (Final destination: Bldg V-55)

Contact backup: Miles Graham (Cargo Ops lead for NG-12) , +1-832-415-1253

(office) or +1-281-386-1813 (cell phone), miles.graham@ngc.com

additional addressees to be mentioned:

Jeff Matthews, +1-757-894-9883, jeffrey.p.matthews@nasa.gov

Joe Ruffing, joseph.g.ruffing@nasa.gov (backup)

Summary

Transportation Containers

No.	Container Type	gross Weight (kg)	Dimension	Contents	Export
1	Metal Container	264	137 x 102 x 97	Flight UTTPS	final, to ISS; box to be returned empty
2	Wooden Box	102	167 x 56 x 42	Lift Beam	final, returning material
3	Plastic Box	87	120 x 80 x 120	Engine Stand	final, returning material
4	Alu. Container	78	121 x 80 x 52	GSE Air Dryer	temporary, to be returned
5	Wooden Box	87	117 x 93 x 63	GSE Box A/B	temporary, to be returned
6	Alu. Container	160	120 x 80 x 117	GSE Electronics	temporary, to be returned
7	Alu. Container	50	121 x 80 x 52	GSE Electronics	temporary, to be returned
8	Wooden Box	198	114 x 107 x 75	GSE Chillers	temporary, to be returned
9	Alu. Container	49	121 x 80 x 52	AAF, Tool box	temporary, to be returned

Transportation Container #1

final destination: ISS

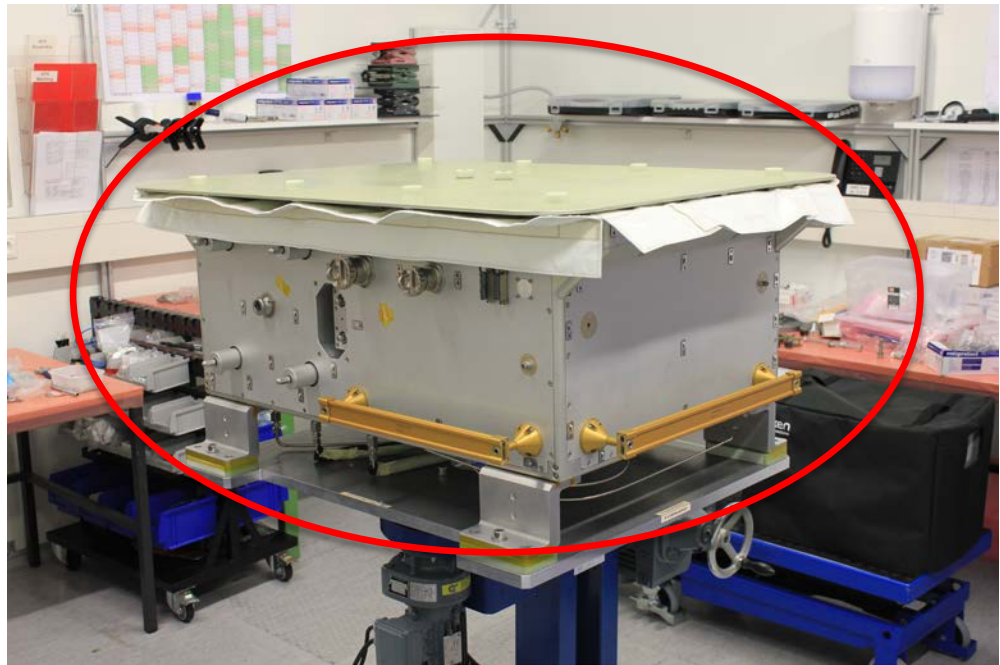
Metal Container (137 x 102 x 97 cm³),

movable on rollers, Clear height for forklift tines: 14 cm

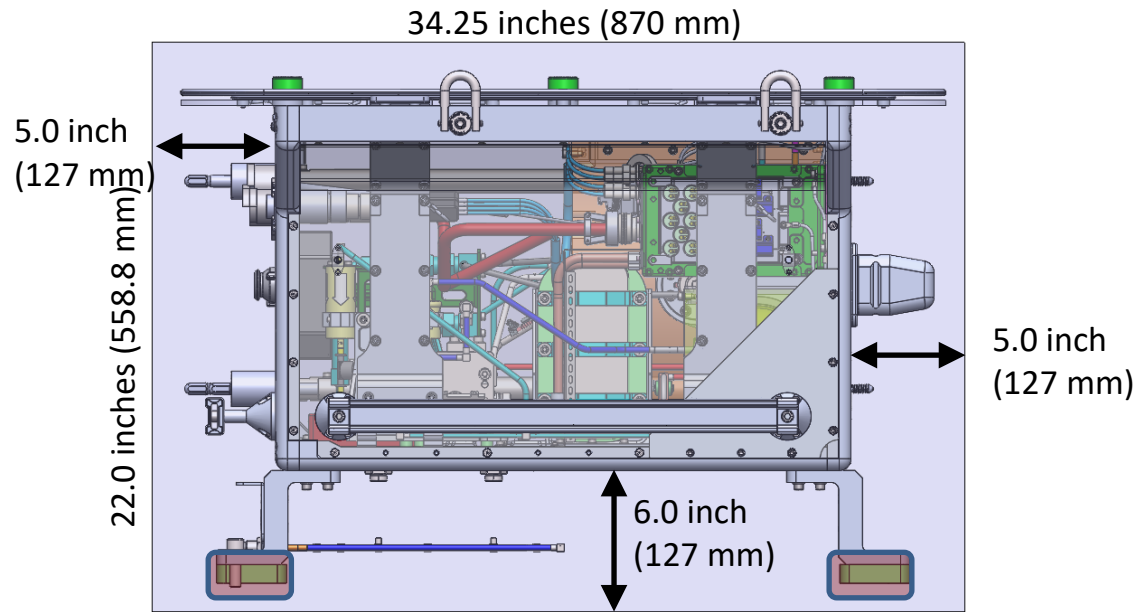
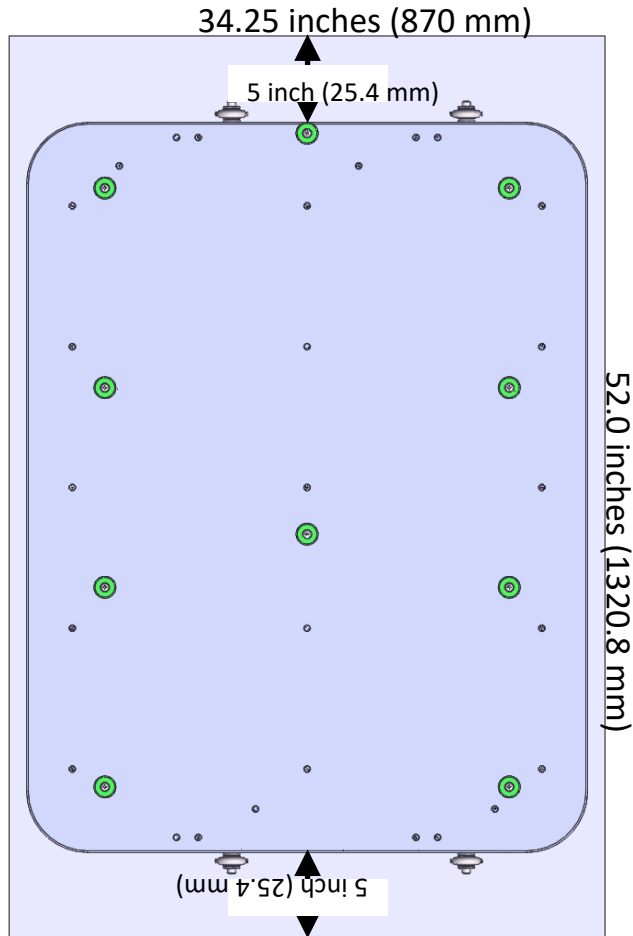
This box includes material to be declared at customs, Value approx. 140,000 EUR.

No.	Description	Model / Type	Qty	Weight (kg)	Dimensions (W x D x H) in cm	Remarks	Total weight (kg)
1	UTTPS	Flight	1	170	137 x 102 x 97	Transporter w. G10+ Datalogger	170

net 170
tara 94
gross 264



UTTPS inside Container



Transportation Container #2

final destination: USA, returning box & material

Wooden Container (167 x 56 x 42 cm³)

Clear height for forklift tines 10 cm

No.	Description	Model / Type	Qty	Weight (kg)	Dimensions (W x D x H) in cm	Remarks	Total weight (kg)
1	Lift Beam	BI (US Cargo Control)	1	45,5	140 x 30 x 30	Hooking chains	45,5

net 45,5
tara 56
gross 102



Transportation Container #3

final destination: USA, returning material
 Plastic Box (120 x 80 x 120 cm³)
 undercarriage euro-palet

No.	Description	Model / Type	Qty	Weight (kg)	Dimensions (W x D x H) in cm	Remarks	Total weight (kg)
1	Engine Stand	BI (Sunex Tools 8300GB)	1	44	120 x 80 x 120		44

net 44
 tara 43
 gross 87



Transportation Container #4

temporary export, to be returned to Germany

Aluminium Box (121 x 80 x 52 cm³)

no undercarriage

No.	Description	Model / Type	Qty	Weight (kg)	Dimensions (W x D x H) in cm	Remarks	Total weight (kg)
1	Vessel	6L CO2 Vessel	1	13	0.2 x 0.2 x 0.7	Empty Vessel	13
2	Scale	KERN DS30K0.1	2	8,6	0.2 x 0.2 x 0.6		17,2
3	Vacuum Pump	Pfeiffer MVP 055-3	1	15,8	32 x 24 x 19		15,8
4	Dry Air	Compressed Air Dryer	1	9	0.4 x 0.3 x 0.6		9
5	Dry Air	Flexible Hoses for Dry Air	1	2	10 m long	w. Clamps	2
6	SS Tubes	SS Flexible Tubes	2	0,5	0.6 m long		1

net 58
 tara 20
 gross 78



Transportation Container #5

temporary export, to be returned to Germany

Wooden Box (117 x 93 x 63 cm³)

Clear height for forklift tines 10 cm

No.	Description	Model / Type	Qty	Weight (kg)	Dimensions (W x D x H) in cm	Remarks	Total weight (kg)
1	GSE-Box	GSE Box-A	1	25	0.8 x 0.6 x 0.4	Alu. Container	25
2	GSE-Box	GSE Box-B	1	18	0.3 x 0.3 x 1.0	Plastic Container	18

net 43
tara 44
gross **87**



Transportation Container #6

temporary export, to be returned to Germany

Aluminium Box (120 x 80 x 117 cm³)

undercarriage euro-palet

No.	Description	Model / Type	Qty	Weight (kg)	Dimensions (W x D x H) in cm	Remarks	Total weight (kg)
1	Power Supply	HMP 4040	2	10	29 x 13 x 37		20
2	Power Supply	Delta SM 7020-D	2	7,3	48 x 43 x 11		14,6
3	Network	Ethernet Switch 9100	1	2,6	48 x 20 x 5		2,6
4	Power Supply	Keysight E3645A	1	6,7	21 x 35 x 9		6,7
5	DMM	Keithley 2701E / 7702	2	6,5	21 x 37 x 9		13
6	Desktop	Dell Precision Tower 3620	2	9	18 x 44 x 36		18
7	NZGL Cables	NZGL Data / Power Cables	2	1	2 m long		2
8	1553 Interface	1553 Adapter w. cables	2	0,3	2 m long		0,6
9	Tool	Projahn Toolbox	1	6,3	40 x 32 x 9		6,3
10	Tool	Wisent Toolbox	1	13,9	47 x 47 x 33		13,9

net 97,7
tara 62
gross 160



Transportation Container #7

temporary export, to be returned to Germany

Aluminium Box (121 x 80 x 52 cm³)

no undercarriage

No.	Description	Model / Type	Qty	Weight (kg)	Dimensions (W x D x H) in cm	Remarks	Total weight (kg)
1	Desktop	Fujitsu Monitor	3	5,6	33 x 25 x 55		16,8
2	Desktop	Keyboard + Mouse	2	0,5	45 x 13 x 2		1
3	Notebook	Lenovo Flex 5	2	1,7	33 x 23 x 2		3,4
4	Notebook	Dell Latitude 3480	1	2	34 x 24 x 2		2
5	Heater	HORST HT30 + LCD + Heater	1	1,1	15 x 12 x 8		1,1
6	DMM	Agilent U1242A	1	0,6	18 x 9 x 5		0,6
7	Tool	Box of Tube Clamps	1	2,5	38 x 32 x 7		2,5
8	Fittings	Bag of Filter, Valves, VCR fittings	1	1	20 x 20 x 20		1
9	Fittings	Bag of SS tubes	1	0,2	30 x 30 x 30		0,2
10	Sensor	Bag of PT1000	1	0,1	20 x 20 x 20		0,1
11	Cables	Bag of Power, RS232, USB, LAN	1	1	30 x 30 x 30		1

net 29,7
 tara 20
 gross 50



Transportation Container #8

temporary export, to be returned to Germany

Wooden Box (114 x 107 x 75 cm³)

Clear height for forklift tines 10 cm

No.	Description	Model / Type	Qty	Weight (kg)	Dimensions (W x D x H) in cm	Remarks	Total weight (kg)
1	Mini-Chiller	LAUDA RE 630S	1	25	20 x 50 x 70	Cooled with Air	25
2	Mini-Chiller	JULABO	1	36	30 x 50 x 70	Cooled with Air	36
3	Chiller material	Flexible Hoses for Chillers	6	3	10 m long	Chillers	18
4	Chiller material	Coolant Bottles	2	10	20 x 18 x 30	Chillers	20
5	Chiller material	Amaplex Hose & Tape	2	0,5	10 m long		1

net 100
tara 98
gross 198



Transportation Container #7

temporary export, to be returned to Germany

Aluminium Box (121 x 80 x 52 cm³)
no undercarriage

No.	Description	Model / Type	Qty	Weight (kg)	Dimensions (W x D x H) in cm	Remarks	Total weight (kg)
1	AAF	AAF FM + FS	1	20	60 x 60 x 40		20
2	Tool	EVA Tool Box for FM UTTPS	2	4	30 x 30 x 25		8
3	Gas Detector	Crowncon, TETRA	1	0,5	12 x 13 x 6		0,5

net 28,5
 tara 20
 gross 49

