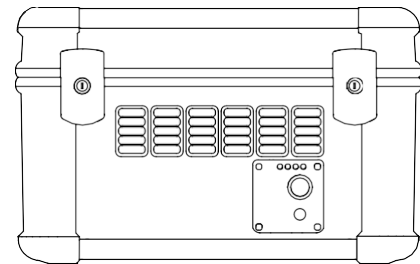


TECHNICAL DATASHEET

Cellbox Flight 2.0



DIMENSION + WEIGHT	
Incubation chamber (L x W x H)	155 mm x 200 mm x 135 mm (6.10" x 7.87" x 5.31")
Overall exterior (L x W x H)	535 mm x 380 mm x 340 mm (21.0" x 15.0" x 13.4")
Cellbox exterior case	ABS plastic
Net weight	17 kg (37.5 lbs)
Cellbox carton overpack (L x W x H)	670 mm x 490 mm x 470 mm (26.4" x 19.3" x 18.5")
Packed weight	23 kg (50.7 lbs)

ELECTRICAL DATA	
Electrical supply of the power adapter	100-240 V AC, 50/60 Hz; 1.4 A max
Electrical supply of the Cellbox	20 V DC; 6.0 A; 120 W max
Battery specifications	4 x standard battery packs (4S2P), 14.4 V, 6900 mAh/99.4 Wh, rechargeable with supplied poweradapter
Main power plug	International plugs EU, CH, UK, US, JP, AU
DC plug	2.5mm x 5.5mm x 11mm, C+, tuning fork type
Mains insulation rating	Residual current operated circuit-breaker type A required

APPLICATION + PERFORMANCE DATA

Application	Portable CO ₂ incubator for the temporary storage and transport of live/fresh cells and tissue cultures. Indoor and outdoor use.
Ambient temperature limitation	The ambient temperature needs to be 3°C lower than the set temperature. The maximum ambient temperature for a 38°C set temperature would therefore be 35°C
Controlled inner temperature range	28°C – 38°C; @0.1°C increments
Controlled inner temperature accuracy	± 0.2°C
Controlled inner temperature uniformity	± 0.1°C
Controlled temperature holding reference (@20°C ambient temperature)	Without Styrofoam overpack & carton: 32 hours In Styrofoam overpack & carton: 48 hours
Controlled CO ₂ concentration range	0% - 18%; @0.1% increments
Controlled CO ₂ concentration accuracy	± 4% rel. @CO ₂ conc. ≥5% ± 0.2% abs. @CO ₂ conc. ≤5%
CO ₂ source	Sublimation of dry ice nuggets
CO ₂ holding reference	Approx. 0.5 kg of dry ice nuggets maintains 5% CO ₂ environment for 32 hours
Pressure sensor range	10 to 1200 hPa
Pressure sensor resolution	0.065 hPa
Pressure sensor accuracy	± 1.5 hPa (@25°C & 750 hPa)
Ambient temperature sensor range	-40°C to +85°C
Ambient temperature sensor resolution	< 0.01°C
Ambient temperature sensor accuracy	± 0.8°C
Tilt sensor range	± 90° (w/o movement) in X, Y
Tilt sensor resolution	1°
Tilt sensor accuracy	± 3°
Accelerometer sensor range	± 19.6 m/s ²
Accelerometer sensor resolution	0.000598 m/s ²
Accelerometer sensor accuracy	± 0.392 m/s ²
Vibration sensor range	0 – 65535/min
Vibration sensor resolution	1/min
Vibration sensor accuracy	± n.D./min

TRANSPORT + PACKAGING

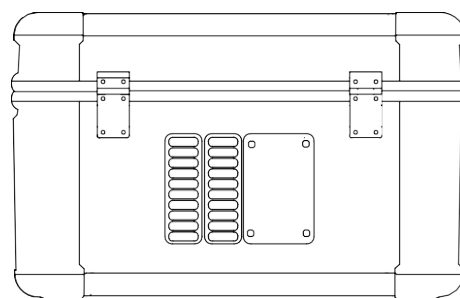
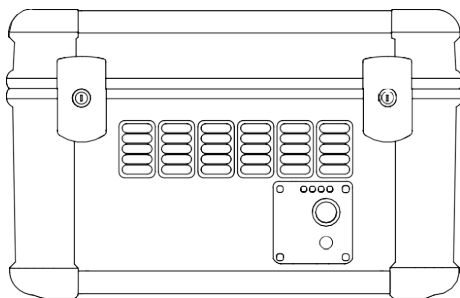
Intended for transport by	Air, Road, Rail, Sea
Transport classification	UN3481, lithium-ion batteries contained in equipment UN1845, if loaded with dry ice
Transport packing instruction	An overpack is recommended in accordance with the regulations for ground transport (ADR), An overpack is required in accordance with the regulations for cargo flight transport (IATA)
Transport label	UN3481 lithium battery label; relevant label if loaded with compliant biological material; Dry ice as conditioner and UN1845 dry ice label if loaded with dry
Packaging instructions	PI967 Section II PI954 if loaded with dry ice

ENVIRONMENTAL CONDITIONS

Air pressure range	70 kPa-105 kPa
Environmental temperature range	0°C to 40°C
Recommended operation temperature	20°C to 30°C
Relative humidity	max. 80% (no condensation)
Pollution Degree	2

CONTROLLER + CONNECTIVITY DATA

Power switch	External
Battery status indicator	LED lights above power switch & via LCD digital display
Touchscreen interface	LCD digital display
Data indication	Real-time display of log time, actual internal temperature, set internal temperature, actual internal CO ₂ concentration, set CO ₂ concentration, Remaining CO ₂ dry ice level (timer based), battery level, UTC and local time
Data logging	Real-time display of log time, actual internal temperature, set internal temperature, actual internal CO ₂ concentration, set CO ₂ concentration, Remaining CO ₂ dry ice level (timer based), battery level, UTC and local time, ambient pressure, ambient temperature, tilt, vibration, max. acceleration
Software licenses	CBS 21 CFR Part 11 Data Security Software CBS Research Software
Connectivity	Bluetooth BLE 4.2 with manual on/off mode
Frequency band	2.4GHz (2400 - 2483,5 MHz)
Transmission power	max. +4 dBm
Cellbox 2.0 App	via iOS/Android App for excel-file data export
Controller type	Digital microprocessor



For further information
please refer to
the Technical Manual.

Cellbox Solutions GmbH
An der Bahn 5
22844 Norderstedt | Germany

Office Hamburg
Englische Planke 8
20459 Hamburg | Germany
T +49 40 2263 1641 0 E office@cellbox-solutions.com
cellbox-solutions.com

