



Maximus / Dominus Ultralight Series

Technical Data Sheet

Maximus UL 03A

Maximus UL 17A

Maximus UL 20A

Dominus UL 03A-4S2PA

Dominus UL 17A-6S1PA

Dominus Bundle UL 17A-6S1PA

Dominus Bundle UL 20A-8S1PA

Maximus UL 03A



Item	Standard	Result
Size	Typical, (L) X (W) X (T)	70.5 x 40.5 x 5.65 mm
Weight		29 g
Temperature Range ¹⁾	Charge	+10 to +45 °C
	Discharge	-35 to +71 °C
	Storage	0 to +45 °C

Item	Standard	Result
Capacity	Typical / Min	3.1 Ah / 3.0 Ah (0.1C)
	Rated	2.8 Ah (1C)
Energy	Typical / Min	12.1 Wh / 11.6 Wh (0.1C)
	Rated	10.8 Wh (1C)
Energy Density	Gravimetric	417 Wh/kg (0.1C)
	Volumetric	750 Wh/L (0.1C)
Voltage	Nominal / Charge / Discharge	3.86 V / 4.30 V / 3.00 V
Charge Current	Standard	0.6 A (0.2C)
	Maximum	12 A (4C)
Discharge Current	Standard	3 A (1C)
	Max Continuous (100 to 0% SOC)	60 A (20C)
		36 A (12C @ -20 °C)
		24 A (8C @ -30 °C)
Max Pulse (≤10 sec @ 100% SOC)	96 A (32C)	
Internal Resistance	ACIR (1 kHz @ 30% SOC)	≤7.3 mΩ
	DCIR (≤5sec, 1C @ 30% SOC)	≤13.5 mΩ
Cycle Life ²⁾	+0.2C / -1C, 100% DOD to 80% SOH	100 cycles
	+0.2C / -1C, 70% DOD to 80% SOH	180 cycles
	+1C / -2C, 100% DOD to 80% SOH	50 cycles
	+1C / -2C, 70% DOD to 80% SOH	90 cycles
Self Discharge ³⁾	Capacity loss (@ 25 °C, 30% SOC)	≤2%/year (estimated)
Certifications	UN 38.3	

¹⁾ The maximum cell body temperature should not exceed 90 °C under the specified operating conditions

²⁾ Typical values

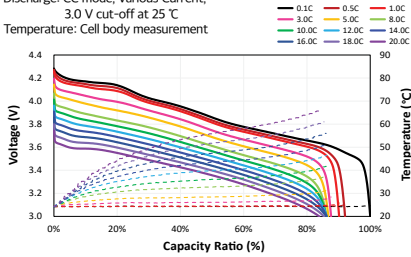
³⁾ Recovery capacity loss, based on initial capacity

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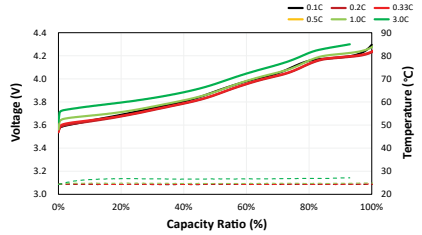
Discharge Performance at 25 °C

Charge: CC-CV mode, 0.2C, 4.3 V, 0.05C cut-off at 25 °C
 Discharge: CC mode, Various Current, 3.0 V cut-off at 25 °C
 Temperature: Cell body measurement



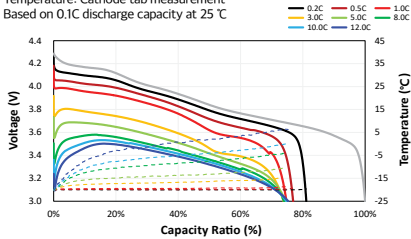
Charge Performance at 25 °C

Charge: CC mode, Various Current, 4.3 V cut-off at 25 °C
 Discharge: CC mode, 0.2C, 3.0 V cut-off at 25 °C
 Temperature: Cell body measurement



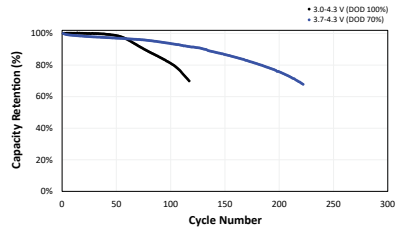
Discharge Performance at -20 °C

Charge: CC-CV mode, 0.2C, 4.3 V, 0.05C cut-off at 25 °C
 Discharge: CC mode, Various Current, 3.0 V cut-off at -20 °C
 Temperature: Cathode tab measurement
 Based on 0.1C discharge capacity at 25 °C



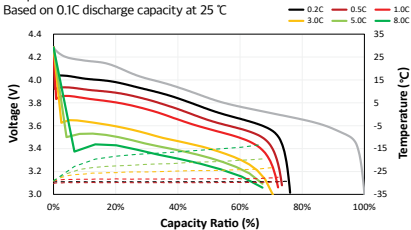
Cycle Life Performance

Charge: CC-CV mode, 0.2C, 4.3 V, 0.05C cut-off at 25 °C
 Discharge: CC mode, 1.0C, 3.0/3.7 V cut-off at 25 °C
 Depth of Discharge: 100%, 70%



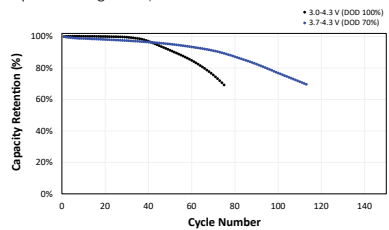
Discharge Performance at -30 °C

Charge: CC-CV mode, 0.2C, 4.3 V, 0.05C cut-off at 25 °C
 Discharge: CC mode, Various Current, 3.0 V cut-off at -30 °C
 Temperature: Cathode tab measurement
 Based on 0.1C discharge capacity at 25 °C

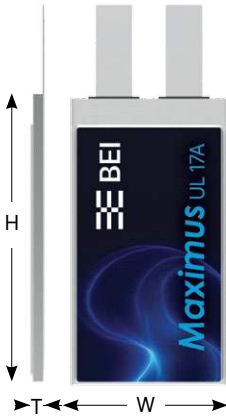


Cycle Life Performance

Charge: CC-CV mode, 1.0C, 4.3 V, 0.05C cut-off at 25 °C
 Discharge: CC mode, 2.0C, 3.0/3.7 V cut-off at 25 °C
 Depth of Discharge: 100%, 70%



Maximus UL 17A



Item	Standard	Result
Size	Typical, (L) X (W) X (T)	143.0 x 85.5 x 6.0 mm
Weight		160 g
Temperature Range ¹⁾	Charge	+10 to +45 °C
	Discharge	-35 to +71 °C
	Storage	0 to +45 °C

Item	Standard	Result
Capacity	Typical / Min	18.0 Ah / 17.0 Ah (0.1C)
	Rated	16.5 Ah (1C)
Energy	Typical / Min	69.4 Wh / 65.6 Wh (0.1C)
	Rated	63.4 Wh (1C)
Energy Density	Gravimetric	434 Wh/kg (0.1C)
	Volumetric	946 Wh/L (0.1C)
Voltage	Nominal / Charge / Discharge	3.86 V / 4.30 V / 3.00 V
Charge Current	Standard	3.4 A (0.2C)
	Maximum	51 A (3C)
Discharge Current	Standard	17 A (1C)
	Max Continuous (100 to 0% SOC)	170 A (10C)
		170 A (10C @ -20 °C)
		136 A (8C @ -30 °C)
Max Pulse (≤10 sec @ 100% SOC)	340 A (20C)	
Internal Resistance	ACIR (1 kHz @ 30% SOC)	≤1.7 mΩ
	DCIR (≤5 sec, 1C @ 30% SOC)	≤2.5 mΩ
Cycle Life ²⁾	+0.2C / -1C, 100% DOD to 80% SOH	100 cycles
	+0.2C / -1C, 70% DOD to 80% SOH	200 cycles
	+1C / -2C, 100% DOD to 80% SOH	50 cycles
	+1C / -2C, 70% DOD to 80% SOH	110 cycles
Self Discharge ³⁾	Capacity loss (@ 25 °C, 30% SOC)	≤2%/year (estimated)
Certifications	UN 38.3, UL1642, IEC62133-2	

¹⁾ The maximum cell body temperature should not exceed 90 °C under the specified operating conditions

²⁾ Typical values

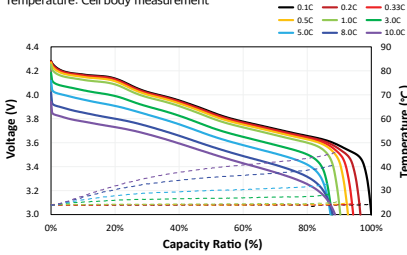
³⁾ Recovery capacity loss, based on initial capacity

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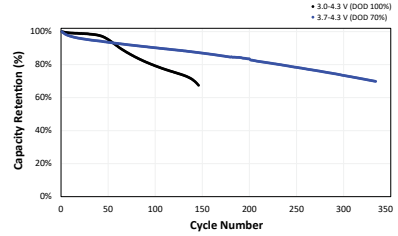
Discharge Performance at 25 °C

Charge: CC-CV mode, 0.5C, 4.3 V, 0.05C cut-off at 25 °C
 Discharge: CC mode, Various Current, 3.0 V cut-off at 25 °C
 Temperature: Cell body measurement



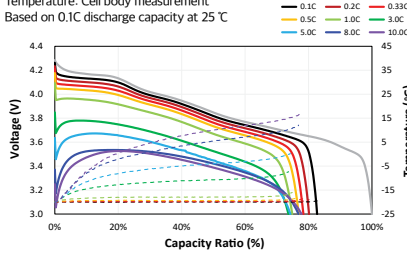
Cycle Life Performance

Charge: CC-CV mode, 0.2C, 4.3 V, 0.05C cut-off at 25 °C
 Discharge: CC mode, 1.0C, 3.0/3.7 V cut-off at 25 °C
 Depth of Discharge: 100%, 70%



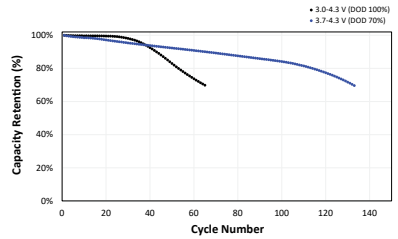
Discharge Performance at -20 °C

Charge: CC-CV mode, 0.1C, 4.3 V, 0.05C cut-off at 25 °C
 Discharge: CC mode, Various Current, 3.0 V cut-off at -20 °C
 Temperature: Cell body measurement
 Based on 0.1C discharge capacity at 25 °C



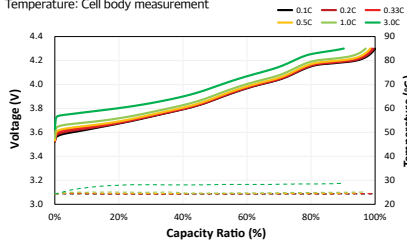
Cycle Life Performance

Charge: CC-CV mode, 1.0C, 4.3 V, 0.05C cut-off at 25 °C
 Discharge: CC mode, 2.0C, 3.0/3.7 V cut-off at 25 °C
 Depth of Discharge: 100%, 70%



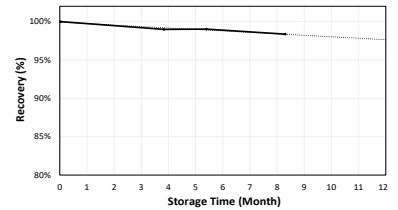
Charge Performance at 25 °C

Charge: CC mode, Various Current, 4.3 V cut-off at 25 °C
 Discharge: CC mode, 0.1C, 3.0 V cut-off at 25 °C
 Temperature: Cell body measurement

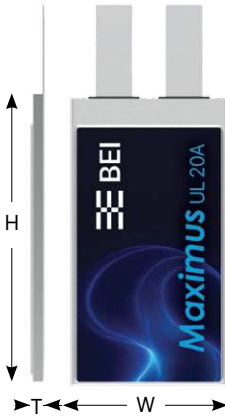


Shelf Life Performance at 25 °C

Temperature Condition: 25 °C
 State of Charge: 30%



Maximus UL 20A



Item	Standard	Result
Size	Typical, (L) X (W) X (T)	143.0 x 85.5 x 5.2 mm
Weight		157 g
Temperature Range ¹⁾	Charge	+10 to +45 °C
	Discharge	-35 to +71 °C
	Storage	0 to +45 °C

Item	Standard	Result
Capacity	Typical / Min	21.1 Ah / 20.0 Ah (0.1C)
	Rated	19.6 Ah (1 C)
Energy	Typical / Min	81.5 Wh / 77.2 Wh (0.1C)
	Rated	75.2 Wh (1C)
Energy Density	Gravimetric	519 Wh/kg (0.1C)
	Volumetric	1,282 Wh/L (0.1C)
Voltage	Nominal / Charge / Discharge	3.86 V / 4.30 V / 3.00 V
Charge Current	Standard / Maximum	4 A (0.2C) / 20 A (1C)
Discharge Current	Standard	20 A (1C)
	Max Continuous (100 to 0% SOC)	100 A (5C)
		160 A (8C @ -20 °C)
		TBD (@ -30 °C)
	Max Pulse (≤10 sec @ 100% SOC)	TBD
	Max Pulse (≤300 sec @ 100% SOC)	200 A (10C)
Internal Resistance	ACIR (1 kHz @ 30% SOC)	≤1.6 mΩ
	DCIR (≤5 sec, 1C @ 30% SOC)	≤4.0 mΩ
Cycle Life ²⁾	+0.2C / -1C, 100% DOD to 80% SOH	70 Cycles
	+0.2C / -1C, 70% DOD to 80% SOH	TBD
	+1C / -2C, 100% DOD to 80% SOH	30 Cycles
	+1C / -2C, 70% DOD to 80% SOH	TBD
Self Discharge ³⁾	Capacity loss (@ 25 °C, 30% SOC)	≤2% / year (estimated)
Certifications	UN 38.3	

¹⁾ The maximum cell body temperature should not exceed 90 °C under the specified operating conditions

²⁾ Typical values

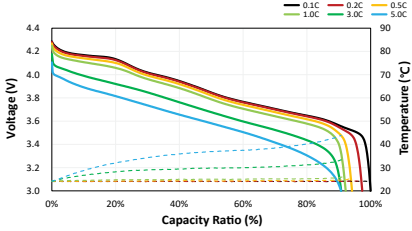
³⁾ Recovery capacity loss, based on initial capacity

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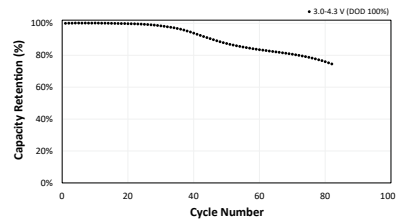
Discharge Rated Capacity at 25 °C

Charge: CC-CV mode, 0.5C, 4.3 V, 0.05C cut-off at 25 °C
 Discharge: CC mode, Various Current, 3.0 V cut-off at 25 °C
 Temperature: Cell body measurement



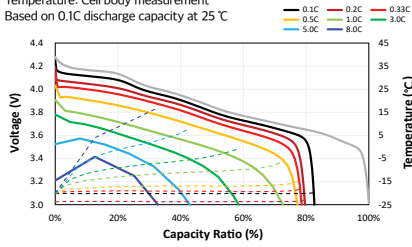
Cycle Life Performance

Charge: CC-CV mode, 0.2C, 4.3 V, 0.05C cut-off at 25 °C
 Discharge: CC mode, 1.0C, 3.0 V cut-off at 25 °C
 Depth of Discharge: 100%



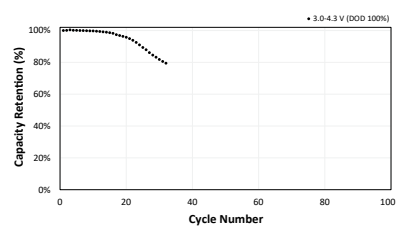
Discharge Rated Capacity at -20 °C

Charge: CC-CV mode, 0.2C, 4.3 V, 0.05C cut-off at 25 °C
 Discharge: CC mode, Various Current, 3.0 V cut-off at -20 °C
 Temperature: Cell body measurement
 Based on 0.1C discharge capacity at 25 °C



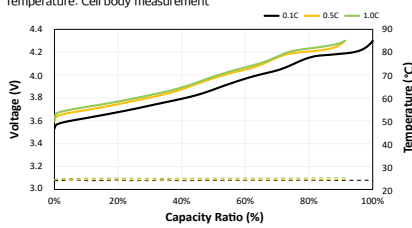
Cycle Life Performance

Charge: CC-CV mode, 1.0C, 4.3 V, 0.05C cut-off at 25 °C
 Discharge: CC mode, 2.0C, 3.0 V cut-off at 25 °C
 Depth of Discharge: 100%

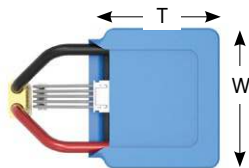


Charge Rated Capacity at 25 °C

Charge: CC mode, Various Current, 4.3 V cut-off at 25 °C
 Discharge: CC mode, 0.5C, 3.0 V cut-off at 25 °C
 Temperature: Cell body measurement



Dominus UL 03A-4S2PA



Item	Standard	Result
Size	Typical, (L) X (W) X (T)	84 x 62 x 49 mm
Weight		350 g
Temperature Range ¹⁾	Charge	+10 to +45 °C
	Discharge	-35 to +45 °C
	Storage	0 to +45 °C

Item	Standard	Result
Capacity	Typical / Min	6.2 Ah / 6.0Ah (0.1C)
	Rated	5.6 Ah (1C)
Energy	Typical / Min	96 Wh / 92.8 W (0.1C)
	Rated	86.4 Wh (1C)
Energy Density	Gravimetric ²⁾	300 Wh/kg (0.1C)
	Volumetric	375 Wh/L (0.1C)
Voltage	Nominal	15.44 V (3.86 V / Cell)
	Charge	17.2 V (4.3 V / Cell)
	Discharge	12.0 V (3.0 V / Cell)
	Recommended landing Voltage ⁵⁾	14.4 V (3.6 V / Cell)
Charge Current	Standard	1.2 A (0.2C)
	Maximum	6.0 A (1C)
Discharge Current	Standard	1.2 A (0.2C)
	Max Continuous (0 to 100% SOC)	90.0 A (15C)
	Max Pulse (≤10 sec @ 100% SOC)	120 A (20C) ³⁾
Internal Resistance	ACIR (1 kHz @ 30% SOC)	14.5 mΩ
	Cycle Life ⁴⁾	+0.2C / -1C, 100% DOD to 80% SOH Under Evaluation
	+1C / -2C, 100% DOD to 80% SOH	50 Cycles

Certifications

¹⁾ The maximum cell body temperature should not exceed 90 °C under the specified operating conditions

²⁾ Exclude XT90 (power), JST-XH (sensing) wire weight

³⁾ Estimate

⁴⁾ Typical values

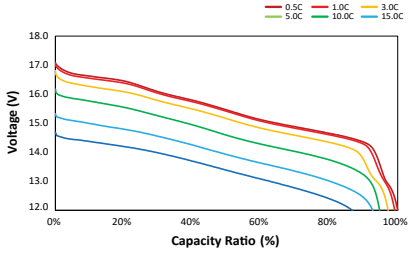
⁵⁾ Landing voltage may vary depending on the user's needs, environment, and purpose. Please contact us for a more detailed voltage range.

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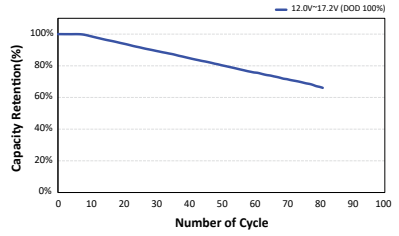
Discharge Performance at 25 °C

Charge: CC-CV mode, 0.5 C, 17.2 V, 0.05 C cut-off at 25 °C
Discharge: CC mode, Various current, 12.0 V cut-off at 25 °C



Cycle Life Performance

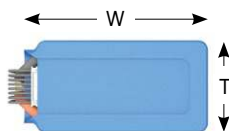
Charge: CC-CV mode, 1.0 C, 17.2 V, 0.05 C cut-off at 25 °C
Discharge: CC mode, 2.0 C, 12.0 V cut-off at 25 °C



- Dominus UL 03A-4S2PA is offered as our standard configuration, with flexible options available upon request.



Dominus UL 17A-6S1PA



Item	Standard	Result
Size	Typical, (L) X (W) X (T)	158 x 95 x 53 mm
Weight		1.24 kg
Temperature Range ¹⁾	Charge	+10 to +45 °C
	Discharge	-35 to +45 °C
	Storage	0 to +45 °C

Item	Standard	Result
Capacity	Typical	18.0 Ah (0.1C)
	Rated / Min	16.5 Ah / 16.3 Ah (1C)
Energy	Typical	416.9 Wh (0.1C)
	Rated / Min	380.4 Wh / 377 Wh (1C)
Energy Density	Gravimetric ²⁾	344 Wh/kg (0.1C)
	Volumetric	524 Wh/L (0.1C)
Voltage	Nominal	23.16 V (3.86 V / Cell)
	Charge	25.8 V (4.3 V / Cell)
	Discharge	18.0 V (3.0 V / Cell)
	Recommended landing Voltage ⁵⁾	21.6 V (3.6 V / Cell)
Charge Current	Standard	3.4 A (0.2C)
	Maximum	17 A (1C)
Discharge Current	Standard	3.4 A (0.2C)
	Max Continuous (0 to 100% SOC)	136 A (8C)
	Max Pulse (≤10 sec @ 100% SOC)	170 A (10C) ³⁾
Internal Resistance	ACIR (1 kHz @ 30% SOC)	≤11 mΩ
Cycle Life ⁴⁾	+0.2C / -1C, 100% DOD to 80% SOH	Under Evaluation
	+1C / -2C, 100% DOD to 80% SOH	40 Cycles
Certifications	UN 38.3	

¹⁾ The maximum cell body temperature should not exceed 90 °C under the specified operating conditions

²⁾ Exclude XT90 (power), JST-XH (sensing) wire weight

³⁾ Estimate

⁴⁾ Typical values

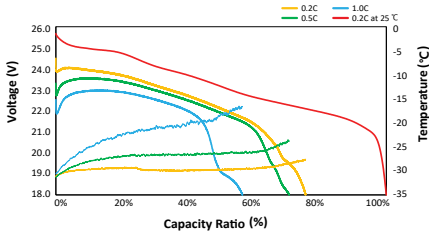
⁵⁾ Landing voltage may vary depending on the user's needs, environment, and purpose. Please contact us for a more detailed voltage range.

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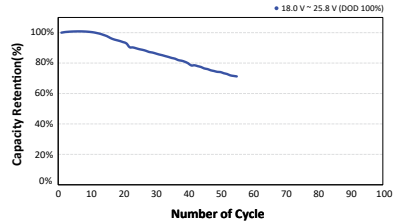
Discharge Performance at -30 °C

Charge: CC-CV mode, 0.5 C, 25.8 V, 0.05 C cut-off at 25 °C
 Discharge: CC mode, Various current, 18.0 V cut-off at -30 °C
 Temperature: Cell body



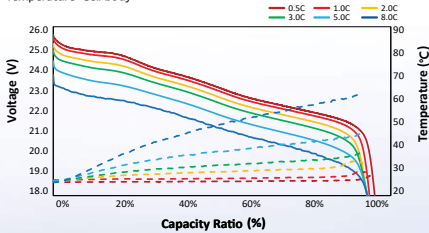
Cycle Life Performance

Charge: CC-CV mode, 1.0 C, 25.8 V, 0.05 C cut-off at 25 °C
 Discharge: CC mode, 2.0 C, 18.0 V cut-off at 25 °C



Discharge Performance at 25 °C

Charge: CC-CV mode, 0.5 C, 25.8 V, 0.05 C cut-off at 25 °C
 Discharge: CC mode, Various current, 18.0 V cut-off at 25 °C
 Temperature: Cell body



- Dominus UL 17A-6S1PA is offered as our standard configuration, with flexible options available upon request.



Dominus-Bundle UL 17A-6S1PA



Item	Standard	Result
Size	Typical, (L) X (W) X (T)	159 x 94 x 53 mm
Weight		1.09 kg
Temperature Range ¹⁾	Charge	+10 to +45 °C
	Discharge	-35 to +45 °C
	Storage	0 to +45 °C

Item	Standard	Result
Capacity	Typical	18.0 Ah (0.1C)
	Rated / Min	16.5 Ah / 16.3 Ah (1C)
Energy	Typical	416.9 Wh (0.1C)
	Rated / Min	380.4 Wh / 377 Wh (1C)
Energy Density	Gravimetric ²⁾	344 Wh/kg (0.1C)
	Volumetric	524 Wh/L (0.1C)
Voltage	Nominal	23.16 V (3.86 V / Cell)
	Charge	25.8 V (4.3 V / Cell)
	Discharge	18.8 V (3.0 V / Cell)
	Recommended landing Voltage ⁵⁾	21.6 V (3.6 V / Cell)
Charge Current	Standard	3.4 A (0.2C)
	Maximum	17 A (1C)
Discharge Current	Standard	3.4 A (0.2C)
	Max Continuous (0 to 100% SOC)	136 A (8C)
	Max Pulse (≤10 sec @ 100% SOC)	170 A (10C) ³⁾
Internal Resistance	ACIR (1 kHz @ 30% SOC)	≤11 mΩ
Cycle Life ⁴⁾	+0.2C / -1C, 100% DOD to 80% SOH	Under Evaluation
	+1C / -2C, 100% DOD to 80% SOH	40 Cycles

Certifications

¹⁾ The maximum cell body temperature should not exceed 90 °C under the specified operating conditions

²⁾ Exclude XT90 (power), JST-XH (sensing) wire weight

³⁾ Estimate

⁴⁾ Typical values

⁵⁾ Landing voltage may vary depending on the user's needs, environment, and purpose. Please contact us for a more detailed voltage range.

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Dominus-Bundle UL 20A-8S1PA



Item	Standard	Result
Size	Typical, (L) X (W) X (T)	156 x 94.5 x 55.4 mm ⁶⁾
Weight		1.48 kg
Temperature Range ¹⁾	Charge	+10 to +45 °C
	Discharge	-35 to +45 °C
	Storage	0 to +45 °C

Item	Standard	Result
Capacity	Typical / Min	21.1 Ah / 20.0 Ah (0.1C)
	Rated	19.6 Ah (1 C)
Energy	Typical / Min	652 Wh / 617.6 Wh (0.1 C)
	Rated	604.6 Wh (1 C)
Energy Density	Gravimetric ²⁾	375.5 Wh/kg (0.1 C)
	Volumetric	531.1 Wh/L (0.1 C)
Voltage	Nominal	30.88 V (3.86 V / Cell)
	Charge	34.4 V (4.3 V / Cell)
	Discharge	24 V (3.0 V / Cell)
	Recommended landing Voltage ⁵⁾	28.8 V (3.6 V / Cell)
Charge Current	Standard	4 A (0.2 C)
	Maximum	20 A (1 C)
Discharge Current	Standard	4 A (0.2 C)
	Max Continuous (0 to 100% SOC)	100 A (5C)
	Max Pulse (≤10 sec @ 100% SOC)	200 A (10 C) ³⁾
Internal Resistance	ACIR (1 kHz @ 30% SOC)	≤11 mΩ
Cycle Life ⁴⁾	+0.2C / -1C, 100% DOD to 80% SOH	Under Evaluation
	+1C / -2C, 100% DOD to 80% SOH	TBD

Certifications

¹⁾ The maximum cell body temperature should not exceed 90 °C under the specified operating conditions

²⁾ Exclude XT90 (power), JST-XH (sensing) wire weight

³⁾ Estimate

⁴⁾ Typical values

⁵⁾ Landing voltage may vary depending on the user's needs, environment, and purpose. Please contact us for a more detailed voltage range.

⁶⁾ Thickness is subject to change. Final specification to be confirmed

- The data in this document is for descriptive purposes only and is not intended to make or imply any guarantee or warranty. BEI reserves the right to make adjustments to this publication, without notice or obligation.



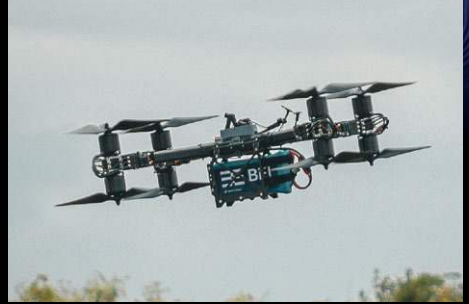
Beyond Energy Innovation



Drone Use Categories Powered by BEI



Mapping Drone



FPV Racing Drone



Swarm Drone



Educational Drone



Delivery Drone



Surveillance Drone



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