

Lithium-ion

Products Range

HELI



Allied FORKLIFTS
Lift it all up

789 Marshall Road, Malaga WA 6090
(08) 9248 8660
www.alliedforklifts.com.au

1-3.5 t

G Series Lithium-ion Forklift Truck

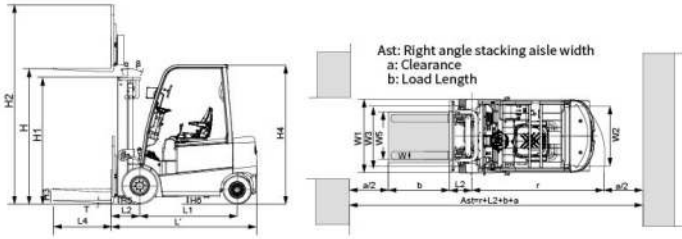


www.heliforklift.net

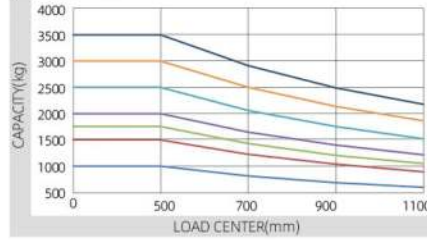
Manufacturer's Data and Design Characteristics

| Characteristics | | | | HELI | | | | | | | |
|----------------------|---|----------------|------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|--|
| Manufacturer | | | | CPD10 | CPD15 | CPD18 | CPD20 | CPD25 | CPD30 | CPD35 | |
| 1.02 | Model | | | CPD10 | CPD15 | CPD18 | CPD20 | CPD25 | CPD30 | CPD35 | |
| 1.03 | Configuration number | | | GCLU(P)/GD1L(P)/GD3U | GCLU(P)/GD1L(P)/GD3U | GCLU(P)/GD1L(P)/GD3U | GCLU(P)/GD1L(P)/GD3U | GCLU(P)/GD1L(P)/GD3U | GCLU(P)/GD1L(P)/GD3U | GCLU(P)/GD1L(P)/GD3U | |
| 1.04 | Rated capacity | Q | kg | 1000 | 1500 | 1750 | 2000 | 2500 | 3000 | 3500 | |
| 1.05 | Load center distance | c | mm | 500 | 500 | 500 | 500 | 500 | 500 | 500 | |
| Tyre | | | | Pneumatic tyre | | Pneumatic tyre | | Solid/Pneumatic tyre | | Pneumatic tyre | |
| 2.01 | Tyre type | | | Pneumatic tyre | | Pneumatic tyre | | Solid/Pneumatic tyre | | Pneumatic tyre | |
| 2.02 | Wheels, number front rear (x=driven wheels) | | | 2X/2 | | 2X/2 | | 2X/2 | | 2X/2 | |
| 2.03 | Front wheel base | W3 | mm | 910 | 910 | 910 | 960 | 960 | 1000 | 1000 | |
| 2.04 | Rear wheel base | W2 | mm | 920 | 920 | 920 | 950 | 950 | 950 | 950 | |
| 2.05 | Tyre (front) | | | 6.00-9-10PR | 6.00-9-10PR | 6.00-9 | 23x9-10-16PR | 23x9-10-16PR | 28x9-15-14PR | 28x9-15 | |
| 2.06 | Tyre (rear) | | | 16x6-8-10PR | 16x6-8-10PR | 16x6-8-10PR | 18x7-8-14PR | 18x7-8-14PR | 18x7-8 | 18x7-8 | |
| size | | | | Pneumatic tyre | | Pneumatic tyre | | Solid/Pneumatic tyre | | Pneumatic tyre | |
| 3.01 | Front overhang | L2 | mm | 390 | 390 | 390 | 434 | 434 | 485 | 490 | |
| 3.02 | Mast tilt angle, front/rear | α/β | ° | 6/8 | 6/8 | 6/8 | 6/8 | 6/8 | 6/10 | 6/10 | |
| 3.03 | Height with mast retraction | H1 | mm | 1985 | 1985 | 1985 | 1995 | 1995 | 2075 | 2180 | |
| 3.04 | Free lifting height | H3 | mm | 145 | 145 | 145 | 145 | 145 | 145 | 150 | |
| 3.05 | Max. Lifting height | H | mm | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | |
| 3.06 | Mast height, extended | H2 | mm | 4030 | 4030 | 4030 | 4042 | 4042 | 4230 | 4230 | |
| 3.07 | Overhead guard height | H4 | mm | 2130 | 2130 | 2130 | 2150 | 2150 | 2215 | 2215 | |
| 3.08 | Fork size: thickness x width x length | T x W x L4 | mm | 32x100x770 | 35x100x920 | 35x100x920 | 40x122x920 | 40x122x1070 | 45x125x1070 | 50x125x1070 | |
| 3.09 | Fork carriage, din standard | | | 2A | 2A | 2A | 2A | 2A | 3A | 3A | |
| 3.10 | Truck body length (fork excluded) | L' | mm | 2070 | 2070 | 2070 | 2285 | 2335 | 2545 | 2550 | |
| 3.11 | truck body width | W1 | mm | 1086 | 1086 | 1086 | 1185 | 1185 | 1241 | 1241 | |
| 3.12 | Turning radius | r | mm | 1750 | 1750 | 1750 | 2000 | 2060 | 2240 | 2260 | |
| Performance | | | | Pneumatic tyre | | Pneumatic tyre | | Solid/Pneumatic tyre | | Pneumatic tyre | |
| 4.01 | Travelling speed: loaded/unloaded | | km/h | 15.0/16.0 | 15.0/16.0 | 15.0/16.0 | 14.5/15.0 | 14.5/15.0 | 15.0/15.5 | 14.5/15.0 | |
| 4.02 | Lifting speed: loaded/unloaded | | mm/s | 290/450 | 270/450 | 280/530 | 280/490 | 260/490 | 280/460 | 270/440 | |
| 4.03 | Lifting speed: loaded/unloaded | | mm/s | 410/600 | 400/600 | 380/600 | 350/510 | 330/510 | 340/460 | 325/460 | |
| 4.04 | Lowering speed: loaded/unloaded | | mm/s | 400/500 | 400/500 | 400/500 | 410/490 | 410/490 | -/500 | -/500 | |
| 4.05 | Gradeability (loaded) | | % | 24 | 22 | 20 | 22 | 20 | 17 | 15 | |
| Weight | | | | Pneumatic tyre | | Pneumatic tyre | | Solid/Pneumatic tyre | | Pneumatic tyre | |
| 5.01 | Total weight (with /without battery) | | kg | 2700/2350 | 2955/2605 | 3105/2755 | 3615/3215 | 4035/3635 | 4760/4200 | 5330/4770 | |
| 6.01 | Battery voltage/capacity | | V/Ah | 48/404 | 48/404 | 48/404 | 48/542 | 48/542 | 80/404 | 80/404 | |
| 6.02 | Battery weight | | kg | 360 | 360 | 360 | 485 | 485 | 490 | 490 | |
| Motor and controller | | | | Pneumatic tyre | | Pneumatic tyre | | Solid/Pneumatic tyre | | Pneumatic tyre | |
| 7.01 | Driving motor power (s2-60min) | | kw | 8.2 | 8.2 | 8.2 | 11.5 | 11.5 | 16.6 | 16.6 | |
| 7.02 | lifting motor power (s3-15%) | | kw | 7.5 | 7.5 | 8.6 | 10.5 | 10.5 | 13 | 13 | |
| 7.03 | lifting motor power (s3-15%) | | kw | 10.6 | 10.6 | 10.6 | 15 | 15 | 13.5 | 13.5 | |
| others | | | | Pneumatic tyre | | Pneumatic tyre | | Solid/Pneumatic tyre | | Pneumatic tyre | |
| 8.01 | Type of drive control | | | CURTIS/INMOTION | CURTIS/INMOTION | CURTIS/INMOTION | CURTIS/INMOTION | CURTIS/INMOTION | CURTIS/INMOTION | CURTIS/INMOTION | |

NOTE: (1) "*" refers to the parameters and configuration with AC lifting system; (2) "(P)" : battery side pulling; (3) For configuration number; 1: CURTIS Controller; 3: Inmotion Controller.



Load Curve



CPD10 CPD15 CPD18 CPD20
CPD25 CPD30 CPD35

Note: The vertical axis stands for load capacity and the horizontal axis stands for load center which is calculated from the front surface of the forks to the gravity of the standard load. The standard load means a cubic with 1000mm edge length. When mast is tilted forward, using non-standard forks or loading large goods, the load capacity will be reduced. The load capacity of standard mast at different load center can be known from this load chart.

LITHIUM BATTERY

| Model | Configuration | Voltage(V) | Capacity(Ah) | Supplier |
|---------------------------|---------------|------------|--------------|--------------------------------|
| CPD10/ CPD15/ CPD18 | Standard | 48 | 404 | ENEROC |
| | Optional | 48 | 400 | China Aviation Lithium Battery |
| CPD20/ CPD25 | Standard | 48 | 542 | ENEROC |
| | Optional | 48 | 540 | China Aviation Lithium Battery |
| CPD30/ CPD35 | Standard | 80 | 404 | ENEROC |
| | Optional | 80 | 542 | ENEROC |
| CPD30/ CPD35 | Optional | 80 | 400 | China Aviation Lithium Battery |
| | Optional | 80 | 540 | China Aviation Lithium Battery |

WIDE VIEW MAST

| Mast model | Max. lifting height mm | Load capacity (load center 500mm)(kg) | | | | | | | Mast overall height (fork to the ground)(mm) | | | | Mast tilt angle (°) α/β | | Service weight(kg) | | | | | | |
|------------|------------------------|---------------------------------------|------|------|------|------|------|------|--|--------|------|------|-------------------------|--------|--------------------|------|------|------|------|------|------|
| | | 1t | 1.5t | 1.8t | 2t | 2.5t | 3t | 3.5t | 1-1.8t | 2-2.5t | 3t | 3.5t | 1-2.5t | 3-3.5t | 1t | 1.5t | 1.8t | 2t | 2.5t | 3t | 3.5t |
| M200 | 2000 | 1000 | 1500 | 1750 | 2000 | 2500 | 3000 | 3500 | 1485 | 1495 | 1570 | 1680 | 6/8 | 6/10 | 2670 | 2925 | 3075 | 3525 | 3945 | 4665 | 5230 |
| M250 | 2500 | 1000 | 1500 | 1750 | 2000 | 2500 | 3000 | 3500 | 1735 | 1745 | 1820 | 1930 | 6/8 | 6/10 | 2685 | 2940 | 3090 | 3570 | 3990 | 4705 | 5280 |
| M300 | 3000 | 1000 | 1500 | 1750 | 2000 | 2500 | 3000 | 3500 | 1985 | 1995 | 2070 | 2180 | 6/8 | 6/10 | 2700 | 2955 | 3105 | 3615 | 4035 | 4760 | 5330 |
| M330 | 3300 | 1000 | 1500 | 1750 | 2000 | 2500 | 3000 | 3500 | 2135 | 2145 | 2220 | 2330 | 6/8 | 6/10 | 2720 | 2975 | 3125 | 3645 | 4065 | 4790 | 5360 |
| M350 | 3500 | 1000 | 1500 | 1750 | 2000 | 2500 | 3000 | 3500 | 2235 | 2245 | 2320 | 2430 | 6/8 | 6/10 | 2735 | 2990 | 3140 | 3660 | 4080 | 4810 | 5380 |
| M370 | 3700 | 1000 | 1500 | 1750 | 2000 | 2500 | 3000 | 3400 | 2335 | 2345 | 2420 | 2530 | 6/8 | 6/10 | 2745 | 3000 | 3150 | 3680 | 4100 | 4840 | 5400 |
| M400 | 4000 | 1000 | 1500 | 1750 | 2000 | 2500 | 2950 | 3350 | 2535 | 2545 | 2620 | 2730 | 6/5 | 6/6 | 2795 | 3050 | 3200 | 3740 | 4160 | 4905 | 5475 |
| M425 | 4250 | 1000 | 1500 | 1750 | 2000 | 2500 | 2850 | 3250 | 2660 | 2670 | 2745 | 2855 | 6/5 | 6/6 | 2810 | 3065 | 3215 | 3760 | 4180 | 4930 | 5500 |
| M450 | 4500 | 1000 | 1400 | 1600 | 1900 | 2300 | 2750 | 3100 | 2785 | 2795 | 2870 | 2980 | 6/5 | 6/6 | 2830 | 3085 | 3235 | 3785 | 4205 | 4955 | 5525 |
| M500 | 5000 | 1000 | 1200 | 1350 | 1800 | 1950 | 2400 | 2650 | 3035 | 3045 | 3120 | 3230 | 6/5 | 6/6 | 2860 | 3115 | 3265 | 3830 | 4250 | 5005 | 5575 |
| M550 | 5500 | 900 | 1100 | 1200 | 1400 | 1500 | 2250 | 2500 | 3335 | 3345 | 3420 | 3530 | 3/3 | 3/6 | 2920 | 3175 | 3325 | 3910 | 4330 | 5085 | 5665 |
| | | 800 | 800 | 850 | 950 | 1100 | 1500 | 1550 | 3585 | 3595 | 3670 | 3780 | 3/3 | 3/6 | 2955 | 3210 | 3360 | 3955 | 4375 | 5135 | 5710 |
| M600 | 6000 | 800 | 800 | 850 | 950 | 1100 | 1500 | 1550 | 3585 | 3595 | 3670 | 3780 | 3/3 | 3/6 | 2955 | 3210 | 3360 | 3955 | 4375 | 5135 | 5710 |

Note: (1) *refers to rated capacity with dual front tires or wider tires;

WIDE VIEW FULL FREE 2-STAGE MAST

| Mast model | Max. lifting height mm | Load capacity (load center 500mm)(kg) | | | | | | | Mast overall height(mm) | | | | Free lifting height (with backrest)(mm) | | Mast tilt angle (°) α/β | | Service weight(kg) | | | | | | | | |
|------------|------------------------|---------------------------------------|------|------|------|------|------|------|-------------------------|--------|------|------|---|--------|-------------------------|------|--------------------|------|------|------|------|------|------|------|------|
| | | 1t | 1.5t | 1.8t | 2t | 2.5t | 3t | 3.5t | 1-1.8t | 2-2.5t | 3t | 3.5t | 1-1.8t | 2-2.5t | 3t | 3.5t | 1t | 1.5t | 1.8t | 2t | 2.5t | 3t | 3.5t | | |
| ZM200 | 2000 | 1000 | 1500 | 1750 | 2000 | 2500 | 3000 | 3500 | 1485 | 1495 | 1570 | 1680 | 478 | 447 | 388 | 503 | 6/8 | 6/10 | 2680 | 2935 | 3085 | 3535 | 3955 | 4706 | 5296 |
| ZM250 | 2500 | 1000 | 1500 | 1750 | 2000 | 2500 | 3000 | 3500 | 1735 | 1745 | 1820 | 1930 | 728 | 697 | 638 | 753 | 6/8 | 6/10 | 2715 | 2970 | 3120 | 3585 | 4005 | 4750 | 5340 |
| ZM300 | 3000 | 1000 | 1500 | 1750 | 2000 | 2500 | 3000 | 3500 | 1985 | 1995 | 2070 | 2180 | 978 | 947 | 888 | 1003 | 6/8 | 6/10 | 2750 | 3005 | 3155 | 3630 | 4050 | 4796 | 5385 |
| ZM330 | 3300 | 1000 | 1500 | 1750 | 2000 | 2500 | 3000 | 3500 | 2135 | 2145 | 2220 | 2330 | 1128 | 1097 | 1038 | 1153 | 6/8 | 6/10 | 2770 | 3025 | 3175 | 3660 | 4080 | 4823 | 5412 |
| ZM350 | 3500 | 1000 | 1500 | 1750 | 2000 | 2500 | 3000 | 3500 | 2235 | 2245 | 2320 | 2430 | 1228 | 1197 | 1138 | 1253 | 6/8 | 6/10 | 2785 | 3040 | 3190 | 3680 | 4100 | 4841 | 5430 |
| ZM370 | 3700 | 1000 | 1500 | 1750 | 2000 | 2500 | 3000 | 3400 | 2335 | 2345 | 2420 | 2530 | 1328 | 1297 | 1238 | 1353 | 6/8 | 6/6 | 2795 | 3050 | 3200 | 3700 | 4120 | 4859 | 5448 |
| ZM400 | 4000 | 1000 | 1500 | 1750 | 2000 | 2500 | 2950 | 3350 | 2535 | 2545 | 2620 | 2730 | 1528 | 1497 | 1438 | 1553 | 6/5 | 6/6 | 2845 | 3100 | 3250 | 3760 | 4180 | 4931 | 5522 |
| ZM425 | 4250 | 1000 | 1500 | 1750 | 2000 | 2500 | 2850 | 3250 | 2660 | 2670 | 2745 | 2855 | 1653 | 1622 | 1563 | 1678 | 6/5 | 6/6 | 2865 | 3120 | 3270 | 3785 | 4205 | 4953 | 5544 |
| ZM450 | 4500 | 1000 | 1400 | 1600 | 1900 | 2300 | 2750 | 3100 | 2785 | 2795 | 2870 | 2980 | 1778 | 1747 | 1688 | 1803 | 6/5 | 6/6 | 2885 | 3140 | 3290 | 3810 | 4230 | 4976 | 5567 |
| ZM500 | 5000 | 1000 | 1200 | 1350 | 1800 | 1950 | 2400 | 2650 | 3035 | 3045 | 3120 | 3230 | 2028 | 1997 | 1938 | 2053 | 6/5 | 6/6 | 2915 | 3170 | 3320 | 3860 | 4280 | 5021 | 5612 |
| ZM550 | 5500 | 900 | 1100 | 1200 | 1400 | 1500 | 2250 | 2500 | 3335 | 3345 | 3420 | 3530 | 2328 | 2297 | 2238 | 2353 | 3/3 | 3/6 | 2980 | 3235 | 3385 | 3940 | 4360 | 5111 | 5704 |
| | | 800 | 800 | 850 | 950 | 1100 | 1600 | 1650 | 3585 | 3595 | 3670 | 3780 | 2578 | 2547 | 2488 | 2603 | 3/3 | 3/6 | 3010 | 3265 | 3415 | 3990 | 4410 | 5158 | 5750 |

Note: (1) *refers to rated capacity with dual front tires or wider tires;

(2) 1-1.8t: free lifting height 365mm increase without backrest;

(3) 2-2.5t: free lifting height 397mm increase without backrest;

(4) 3-3.5t: free lifting height 396mm increase without backrest.

WIDE VIEW FULL FREE 3-STAGE MAST

| Mast model | Max. lifting height mm | Load capacity (load center 500mm)(kg) | | | | | | | Mast overall height(mm) | | | | Free lifting height (with backrest)(mm) | | Mast tilt angle (°) α/β | | Service weight(kg) | | | | | | | |
|------------|------------------------|---------------------------------------|------|------|------|------|------|------|-------------------------|--------|------|------|---|--------|-------------------------|------|--------------------|------|------|------|------|------|------|------|
| | | 1t | 1.5t | 1.8t | 2t | 2.5t | 3t | 3.5t | 1-1.8t | 2-2.5t | 3t | 3.5t | 1-1.8t | 2-2.5t | 3t | 3.5t | 1t | 1.5t | 1.8t | 2t | 2.5t | 3t | 3.5t | |
| ZSM360 | 3600 | 1000 | 1500 | 1750 | 2000 | 2500 | 3000 | 3400 | 1780 | 1795 | 1930 | 770 | 774 | 748 | 753 | 6/8 | 6/6 | 2795 | 3050 | 3145 | 3775 | 4195 | 5015 | 5555 |
| ZSM400 | 4000 | 1000 | 1500 | 1750 | 2000 | 2500 | 2900 | 3250 | 1915 | 1920 | 2055 | 905 | 900 | 873 | 878 | 6/5 | 6/6 | 2820 | 3075 | 3170 | 3810 | 4230 | 5050 | 5590 |
| ZSM435 | 4350 | 1000 | 1450 | 1650 | 2000 | 2450 | 2750 | 3150 | 2030 | 2045 | 2180 | 1020 | 1024 | 998 | 1003 | 6/5 | 6/6 | 2845 | 3100 | 3195 | 3845 | 4265 | 5085 | 5625 |
| ZSM450 | 4500 | 1000 | 1400 | 1600 | 2000 | 2300 | 2700 | 3000 | 2080 | 2095 | 2230 | 1070 | 1074 | 1048 | 1053 | 6/5 | 6/6 | 2855 | 3110 | 3205 | 3860 | 4280 | 5101 | 5641 |
| ZSM470 | 4700 | 1000 | 1350 | 1550 | 2000 | 2200 | 2700 | 2900 | 2150 | 2160 | 2230 | 1140 | 1140 | 1048 | 1053 | 6/5 | 6/6 | 2870 | 3125 | 3220 | 3875 | 4295 | 5105 | 5645 |
| ZSM480 | 4800 | 1000 | 1300 | 1500 | 1900 | 2050 | 2600 | 2800 | 2180 | 2195 | 2330 | 1170 | 1174 | 1148 | 1153 | 6/5 | 6/6 | 2880 | 3135 | 3230 | 3885 | 4305 | 5130 | 5670 |
| ZSM500 | 5000 | 1000 | 1200 | 1300 | 1800 | 1950 | 2400 | 2650 | 2280 | 2295 | 2430 | 1270 | 1274 | 1248 | 1253 | 6/5 | 6/6 | 2900 | 3155 | 3250 | 3915 | 4335 | 5159 | 5699 |
| ZSM540 | 5400 | 1000 | 1050 | 1100 | 1400 | 1550 | 2250 | 2500 | 2405 | 2420 | 2555 | 1395 | 1400 | 1373 | 1378 | 3/3 | 3/6 | 2925 | 3180 | 3275 | 3955 | 4375 | 5194 | 5734 |
| | | 750 | 750 | 750 | 950 | 1100 | 1550 | 1600 | 2630 | 2645 | 2780 | 1620 | 1624 | 1598 | 1603 | 3/3 | 3/6 | 2995 | 3250 | 3345 | 4020 | 4440 | 5293 | 5833 |
| ZSM600 | 6000 | 700 | 750 | 800 | 850 | 950 | 1100 | 1600 | 2830 | 2835 | 2970 | 1820 | 1814 | 1788 | 1793 | 3/3 | 3/6 | 3035 | 3290 | 3385 | 4050 | 4470 | 5346 | 5886 |
| ZSM700 | 7000 | 900 | 950 | 950 | 1100 | 1200 | 1600 | 2100 | 3015 | 3105 | 3240 | 2005 | 2084 | 2058 | 2063 | 3/3 | 3/6 | 3075 | 3330 | 3425 | 4105 | 4525 | 5430 | 5970 |

Note: (1) *refers to rated capacity with dual front tires or wider tires;

(2) 1-1.8t: free lifting height 480mm increase without backrest;

(3) 1-1.8t: free lifting height 400mm increase without backrest when assembled with pulley block;

(4) 2-2.5t: free lifting height 451mm increase without backrest;

(5) 2-2.5t: free lifting height 401mm increase without backrest when assembled with pulley block;

(6) 3-3.5t: free lifting height 397mm increase without backrest.

The characteristics of HELI Lithium-ion



0

Green Energy

Zero emission, Low noise, Free of heavy metals, No corrosion, No acid mist volatilization.



4000

Long Service Life

Over 75% capacity reserved after 4000 shifts operation
Longer service life than lead-acid battery in equal working condition, 5 years or ten thousand hours quality guarantee for high performance lithium battery assembly



95%

High Efficiency Energy Saving

High-energy density, self discharging rate lower than 1% per month, 95% energy conversion rate, superior charging and discharging performance.



-25°C

Low Temperature Characteristics

Lithium battery is better than lead-acid battery when working between -25°C and 55°C



0

Maintenance Free

Unnecessary of fluid adding and dust proofing, Daily maintenance free, Manual maintenance free.



2C

Quick Charge

Flexible to charge, easy to operate, no impact on battery life
Unnecessary to change battery, cost saving



6-8h

Strong Endurance

2 hours charging meet 6-8 hours working demand.



100%

High Safety

According to the characteristics of industrial vehicles, it achieves safety protection design which includes lithium battery materials, battery core type, pack technique and system power management

| Lithium Battery | VS | Lead-acid Battery |
|------------------|---------------------------------|---------------------|
| 1-2 hours | Charging time | 8-12 hours |
| ≥95% | Charging | 60% |
| ≥4000 | Battery Service Life | 1200 |
| 5 years | Quality Guarantee | 1 year |
| 0 | Battery Replacement (lifecycle) | 3-4 |
| Maintenance Free | Maintenance | Regular Maintenance |
| -40°C | Low Temperature Characteristics | Out Of Order |