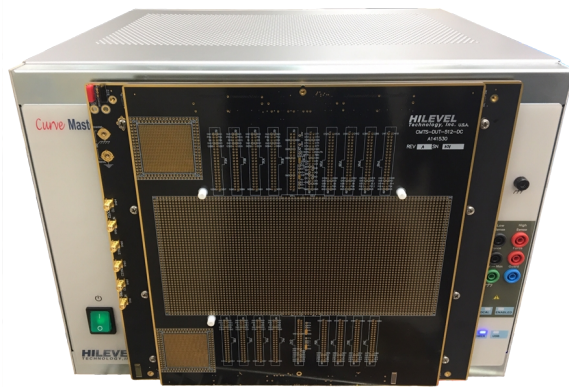


# Curve Master™



*CurveMaster L*

**Precision  
Curve  
Tracer**

The **HILEVEL CurveMaster™** brings modern technology and components to the world of curve tracing. With up to 2,048 pins and all new high-accuracy DC parametrics, the low-cost CurveMaster™ could become your favorite lab instrument!

**Curve Master™**

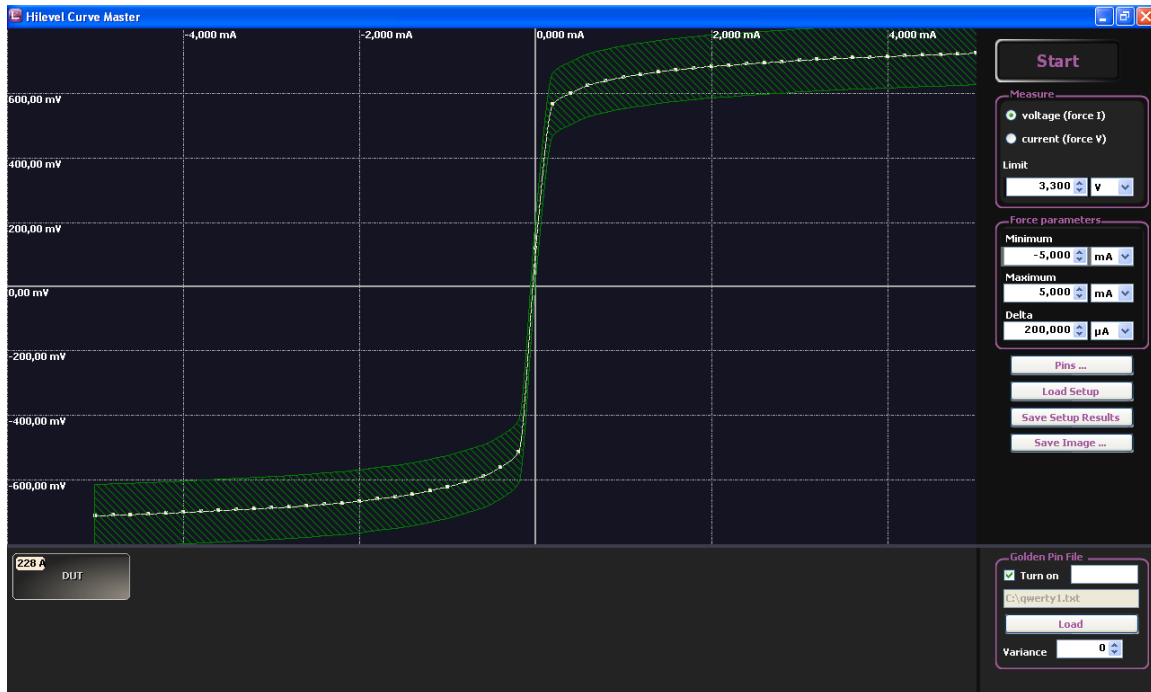
## Price and Performance

The CurveMaster™ brings new price/performance efficiency to curve tracing and Failure Analysis. Curve trace has been a standard feature in our full-power chip tester for years, so the CurveMaster™ is built with today's components and technology. With all new high-accuracy DC Parametrics, you'll enjoy the most powerful curve tracer you have ever used. Why settle for old used equipment or repackaged old technology?

**CurveMaster X Max**



HILEVEL's CurveMaster™ software is easy to use and setup on the Windows platform, making curve tracing fast and easy.



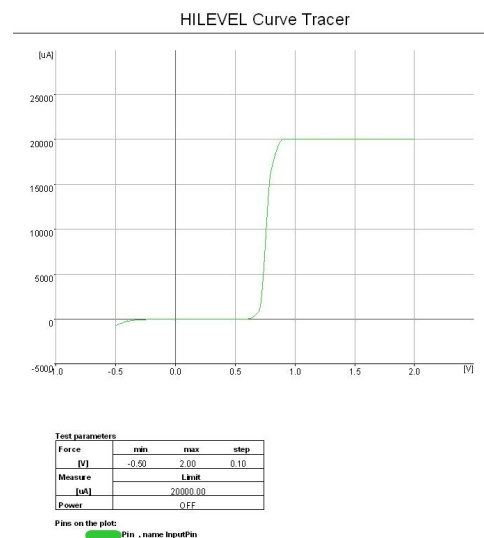
Golden Pin is a definable “tolerance” that can be used to capture the traces of all the pins on a golden (known good) device. The results are saved and used by the software to verify compliance of more devices. Test results can be saved/viewed as a table or graphic image, or both.

```

;Curve Trace File Result
VOLTAGE ; Force mode

SysCh 2 3
;Force 2 3

NAME
-1.0000 -10000.0000 -10000.0000
-0.9000 -10000.0000 -10000.0000
-0.8000 -10000.0000 -10000.0000
-0.7000 -6578.8267 -6480.9015
-0.6000 -2026.3070 -2000.4268
-0.5000 -624.1113 -617.4615
-0.4000 -192.2290 -190.5887
-0.3000 -59.2074 -58.8280
-0.2000 -18.2361 -18.1582
-0.1000 -5.6168 -5.6048
0.0000 -1.7300 -1.7300
0.1000 0.0000 0.0000
0.2000 0.0003 0.0003
0.3000 0.0068 0.0068
0.4000 0.1341 0.1352
0.5000 2.6565 2.6851
0.6000 52.6349 53.3158
0.7000 1042.8755 1058.6332
    
```



## High Voltage Testing

The Hilevel CurveMaster™ supports high-voltage devices up to  $\pm 120$  volts using our DCHiV boards. Each board provides 8 outputs with individual sense and guard signals to allow for low current measurements without introducing any leakage current. These outputs are also accessible from the rear of the chassis using 4 banana jacks for full Kelvin 4-wire measurements. The DCHiV boards can plug into any available slot pair and can be mixed with our standard DC128 resource boards in the same CurveMaster™ chassis.

## Specifications

### DCHiV PARAMETRIC MEASUREMENTS

One HVSMU switched among 8 outputs on each DCHiV board

Two Force Voltage Ranges:  $\pm 120\text{V}$  up to 200mA,  $\pm 30\text{V}$  up to 1A, Maximum power 25W

Force Voltage Resolution: 5mV                      Current Limit Resolution: 50 $\mu\text{A}$

Voltage Measurement Resolution: 15 $\mu\text{V}$

Current Measurement Range: 200nA to 2A

Current Ranges	Resolution	Accuracy
$\pm 200$ nA	20 fA	$\pm 0.4\%$ of Value + 40 pA
$\pm 2$ $\mu\text{A}$	200 fA	$\pm 0.3\%$ of Value + 200 pA
$\pm 20$ $\mu\text{A}$	2 pA	$\pm 0.2\%$ of Value + 1 nA
$\pm 200$ $\mu\text{A}$	20 pA	$\pm 0.1\%$ of Value + 10 nA
$\pm 2$ mA	200 pA	$\pm 0.1\%$ of Value + 100 nA
$\pm 20$ mA	2 nA	$\pm 0.1\%$ of Value + 1 $\mu\text{A}$
$\pm 200$ mA	20 nA	$\pm 0.1\%$ of Value + 10 $\mu\text{A}$
$\pm 2$ A	200 nA	$\pm 0.1\%$ of Value + 100 $\mu\text{A}$



# Specifications

<b>DC128 PARAMETRIC MEASUREMENTS</b>		
Four SMU per 128 pins, FET relay matrix 128x4, modes: FVMI, FIMV, FNMV		
Force Voltage Range: -8V to +8V		Voltage Measurement Range: -8V to +8V
Resolution: 125µV		Resolution: 1.25µV
Force Current Range: -200 mA to +200 mA		Accuracy: 0.02% ± 200µV
Resolution & Accuracy: Range Dependent		Current Measurement Range: ± 200 mA
		Resolution & Accuracy: Range Dependent
<b>Current Ranges</b>	<b>Resolution</b>	<b>Accuracy</b>
± 20 µA	2.5 pA	± 0.1% of Value + 20 pA
± 200 µA	25 pA	± 0.1% of Value + 100 pA
± 2 mA	250 pA	± 0.1% of Value + 1 nA
± 20 mA	2.5 nA	± 0.1% of Value + 10 nA
± 200 mA	25 nA	± 0.1% of Value + 100 nA

**CURVE TRACER RANGE, RESOLUTION AND ACCURACY**  
 Same as DC PARAMETRIC MEASUREMENT specifications above.

**ENVIRONMENTAL**

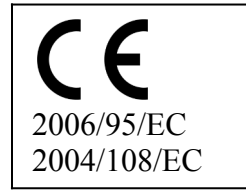
**Power**  
 120VAC single phase, Max 15A

**Max Weight**  
*CurveMaster X Max:* 49kg (107 lbs) 2048 pins  
*Chassis only:* 75 lbs, *Each 128 pins:* 2 lbs  
*CurveMaster L:* 28kg (61 lbs) 1024 pins  
*CurveMaster C:* 14kg (30 lbs) 384 pins  
*Each 128 pins:* 2 lbs

**Dimensions (Test head only)**  
 H508mm x W438mm x D438mm (2048 model)  
 H330mm x W438mm x D438mm (1024 model)  
 H165mm x W515mm x D450mm (384 model)

**Cooling**  
 forced air cooled

**Temperature**  
 60 to 80 °F (16 to 27°C)



**HILEVEL**  
 TECHNOLOGY, INC.

***Excellence In Test***  
***Since 1979***

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