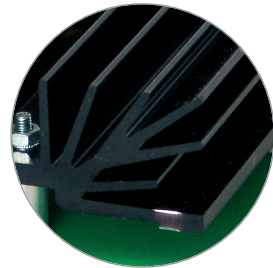
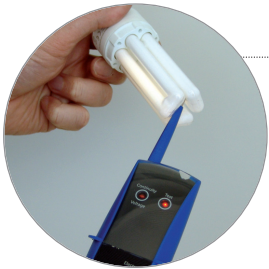


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Welcome to

HDT Hoover Dam Technology



About us

The HDT Hoover Dam Technology is a company which operates worldwide in an area-wide network for sales and production. HDT was founded in 2003 with the commitment to be the leader in product quality and customer service in the marketplaces we serve. The HDT product range is still designed, built, tested and delivered with these goals in mind.

Products



We can offer our customers a comprehensive range of high quality products. All instruments within the HDT group are manufactured with the same quality principles in mind and of course our customers can be entirely confident that all quality procedures from R&D to purchasing and manufacturing strictly adhere to the internationally recognised ISO 9000 standard.

New Ideas

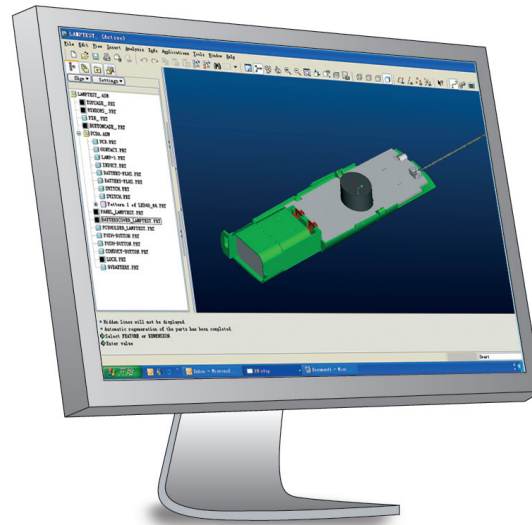


Our innovative thinking is focused on universal and user friendly products and shall provide you a high level of profit. We are aiming for this target every day with our motivated team.



Research & Development

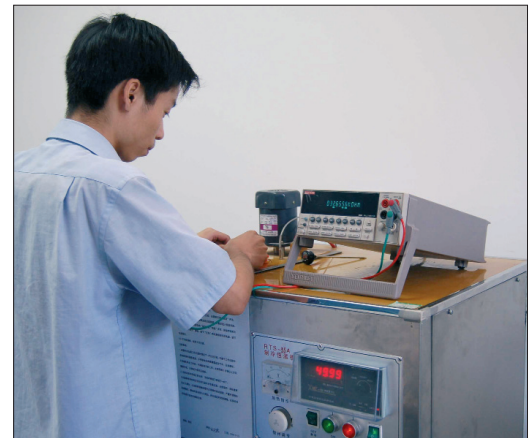
Our teams are experts in computer-based design, modeling and analysis to assure user friendly product designs. Utilizing the latest CAD systems, we are well versed in simulation and verification of mechanical and electrical properties.



Manufacturing

Our modern production plant located in Dong Guan/China is fully equipped with state-of-the-art technology. It is our commitment to introduce the utmost flexibility into the entire manufacturing process from the initial order to a prompt delivery.

Using the most advanced production management systems, our goal is to consistently deliver exceptional quality products.



Vision

The vision for the HDT group is to be recognized as a premier connectivity solutions provider, known for management talent, market leadership and operational excellence. The company will be respected for the quality and integrity of its people, products and processes. Through a focus on continuous improvement, the company will produce high quality engineered products and services that exceed the expectations of our customers.

HDT Hoover Dam Technology – Your Partner for Electronic Instruments

Handy Design



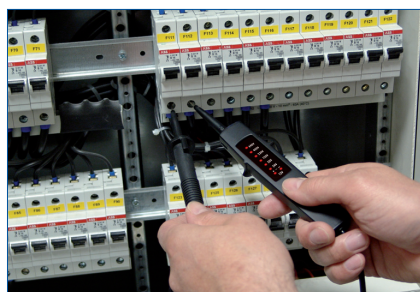
HDT Voltage Tester 3010

Voltage Tester 3010

- Voltage measurement 12V...690 V AC/DC
- Automatic polarity indication
- LED display 12, 24, 50, 120, 230, 400, 690 V AC/DC
- No batteries needed
- Safety acc. EN 61243-3, IEC 61010-1

Technical Data

Voltage Range	12...690 V AC/DC
Frequency Range	DC, 50/60 Hz
Indication	8 LED
Test Current	< 3,5 mA
Duration Time (DT)	continuous operation
Pollution Degree	2
Measurement Cat.	CAT III / 690 V
Protection Degree	IP 54
Safety	EN 61243-3, IEC 61010-1
Power Supply	without batteries
Dimension	appr. 205 x 55 x 21 mm
Weight	appr. 115 g



Scope of Supply

- 1 pc HDT Voltage Tester 3010
- 1 pc Instruction Manual

Order Information

Description	Cat. No.
HDT Voltage Tester	3010

OPTIONS

Packaging	Gift Box	Sliding Blister
	4-color	4-color
	Neutral white	Neutral white
Instruction Manual	with specific customer data	

HDT Voltage Tester 3001

Rugged

Voltage Tester 3001

- AC/DC Voltage Measurement up to 690V
- Continuity test function with optical and acoustical indication up to 200 kΩ
- Integrated single pole test for phase detection
- Automatic AC/DC voltage measurement selection
- Bright LED display
- Fully operational voltage display even when batteries are discharged or when no batteries are fitted
- Rugged, ergonomically formed housing for perfect handling
- Quick single hand test on 19 mm contact distance outlets
- Probe-tip protection for reducing the danger of injuries which may be caused by probe-tips
- Designed according EN 61010, EN 61243-3

Technical Data

Display	10 LED (+12V, -12V, 24V, 50V, 120V, 230V, 400V, 690V, Single Pole, Continuity)
Voltage Range	12...690 V
Polarity Indication	automatic
Frequency Range	DC, 0...65 Hz
Test Current	< 3.5 mA
Single Pole Voltage Test	100...690V AC
Continuity/Diode Test	optical / acoustical
Measurement Cat.	CAT III / 690 V
Pollutin Degree	2
Safety	EN 61010, EN 61243-3
Power Supply Batteries	2 x 1.5 V, IEC LR03, AAA
Dimension	approx. 205 x 67 x 27 mm
Weight	approx. 130 g



Scope of Supply

- 1 pc HDT Voltage Tester 3001
- 2 pc Batteries, 1.5V IEC LR03, AAA
- 1 pc Instruction Manual
- 1 pc 4C gift box

Order Information

Description	Cat. No.
HDT Voltage Tester	3001



OPTIONS

Packaging	Gift Box	Sliding Blister
	4-color Neutral white	4-color Neutral white
Instruction Manual	with specific customer data	



AC/DC Voltage up to 600 V



Digital Multimeter 20020

Digital Multimeter with Temperature Measurement

- Digital Multimeter with manual range selection
- 3½ digit LC display, max. reading 1999 digits
- AC/DC voltage measurement up to 600 V
- AC/DC current measurement up to 10 A
- Resistance measurement
- Temperature measurement
- Battery Test
- Incl. Test Leads, Temperature Wire Probe and Rubber Holster

Technical Data

Display	3½ digit LC display, 1999 Digits
AC/DC Voltage	2 V...600 V / 1 mV
Tolerance	±(1.5%+5rdg)/±(0.8%+3rdg)
AC/DC Current	200mA, 10A / 0.1, 10mA
Tolerance	±(1.5% + 5 rdg)
Resistance	2kΩ...2MΩ
Temperature	-40...400°C
Battery Test	1.5V / 9V
Power Supply	Battery, 9 V IEC 6LR61
Dimension	approx. 150 x 80 x 45 mm
Weight	approx. 250 g



Scope of Supply

- 1 pc Digital Multimeter 20020
- 1 pc Battery 9V, IEC 6LR61
- 2 pc Test Leads (red, black)
- 1 pc Temperature Wire Probe
- 1 pc Rubber Holster
- 1 pc Instruction Manual

Order Information

Description	Cat. No.
Digital Multimeter	20020

OPTIONS

Packaging	Gift Box	Sliding Blister
	4-color	4-color
	Neutral white	Neutral white
Instruction Manual	with specific customer data	

Digital Multimeter 20030

Digital Auto Range Multimeter

- Digital Multimeter with Auto Range
- 3³/₄ digit LC display, max. reading 4000 digits
- AC/DC voltage measurement up to 600 V
- AC/DC current measurement up to 10 A
- Resistance measurement
- Capacity measurement
- Diode test
- Temperature measurement
- Frequency measurement
- Incl. Test Leads, Temperature Wire Probe and Rubber Holster

Technical Data

Display	3 3/4 digit LC display 4000 counts
Voltage AC/DC	0...600 V
Frequency	0...9.999 MHz
Resistance	0...40.00 MΩ
Continuity	< 50 Ω
Diode	0...1.5 V
Capacity	0...200 μF
Temperature	-40...400°C
Current AC/DC	0...10 A
Power Supply	2 x 1.5 V LR03, AAA
Dimension	150 x 80 x 45 mm
Weight	approx. 250 g

Auto Range Multimeter



Scope of Supply

- 1 pc. Digital Multimeter 20030
- 2 pc. Batteries 1.5V LR03, AAA
- 2 pc. Test Leads (red, black)
- 1 pc. Temperature Wire Probe
- 1 pc. Rubber Holster
- 1 pc. Instruction Manual

Order Information

Description	Cat. No.
Digital Multimeter	20030



OPTIONS

Packaging	Gift Box	Sliding Blister
	4-color	4-color
	Neutral white	Neutral white
Instruction Manual	with specific customer data	

Portable Unit



HDT Voltage Tester Proving Unit

Voltage Tester Proving Unit with Continuity Tester

- Portable, battery powered Proving Unit for testing Two Pole Voltage Testers up to 690 V
- Continuity Tester for testing fused test leads
- Optical and acoustical continuity indication
- Low Battery indication

Technical Data

VOLTAGE TEST

Output Voltage 690V DC / 200 k Ω load
 Test Current < 3,5 mA

CONTINUITY TEST

Continuity Range < 100 Ω
 Test Current approx. 1 mA

Temperature Range 0...40°C/max. 70% r.H.
 Power Supply 6 x 1.5 V IEC LR6
 Dimension approx. 210 x 105 x 40 mm
 Weight approx. 400 g

Scope of Supply

1 pc HDT Proving Unit
 6 pc Batteries 1.5 V IEC LR6
 1 pc Instruction Manual

Order Information

Description	Cat. No.
HDT Proving Unit	8200

OPTIONS

Packaging	Gift Box	Sliding Blister
	4-color	4-color
	Neutral white	Neutral white
Instruction Manual	with specific customer data	

HDT Rotary Field Indicator 8110

phase indication

Rotary Field Indicator

- Rotary Field Indicator with phase indication
- Voltage and frequency range suitable for industrial systems
- Phase and rotary indication via LED
- Incl. Test Leads, Crocodil Clamps and Test Probes
- Safety acc. IEC/EN 61010, IEC/EN 61557-7

Technical Data

Voltage Range	150...500 V AC
Frequency Range	50 / 60 Hz
Indication	5 LED
Test Current	< 3,5 mA
Duration Time (DT)	continous operation
Pollution Degree	2
Measurement Cat.	CAT III / 300 V
Protection Degree	IP 40
Safety	IEC/EN 61010, IEC/EN 61557-7
Power Supply	without batteries
Dimension	approx. 130 x 72 x 30 mm
Weight	approx. 190 g



Scope of Supply

- 1 pc HDT Rotary Field Indicator
- 3 pc. Test Leads
- 3 pc. Test Probes
- 1 pc. Crocodil Clamps
- 1 pc Instruction Manual

Order Information

Description	Cat. No.
Rotary Field Indicator	8110

OPTIONS

Packaging	Gift Box	Sliding Blister
	4-color	4-color
	Neutral white	Neutral white
Instruction Manual	with specific customer data	

with phase indication



HDT Motor Tester 8100

HDT Motor Tester 8100

- Rotary Field Indicator with phase indication
- Voltage free determination of the motor connection (U,V,W)
- Contact-free determination of the rotation of running motors
- Magnetic field indication at AC-valve coils
- Safety acc. IEC/EN 61010, IEC/EN 61557-7

Technical Data

Voltage Range	1...440 V AC
Phase Indication	120...440 V
Frequency Range	2...400 Hz
Test Current	< 3,5 mA
Duration Time (DT)	durable
Pollution Degree	2
Measurement Cat.	CAT III / 300 V
Protection Degree	IP 40
Safety	IEC/EN 61010, IEC/EN 61557-7
Power Supply	1 x 9 V, IEC 6LR61
Dimension approx.	130 x 72 x 30 mm
Weight approx.	190 g



Scope of Supply

- 1 pc HDT Motor Tester 8100
- 1 pc Battery 1 x 9 V IEC 6LR61
- 3 pc Test Leads
- 3 pc Crocodile Clamps
- 3 pc Test Probes
- 1 pc Instruction Manual

Order Information

Description	Cat. No.
HDT Motor Tester	8100

OPTIONS

Packaging	Gift Box	Sliding Blister
	4-color	4-color
	Neutral white	Neutral white
Instruction Manual	with specific customer data	

HDT Rotary Field Indicator CAT IV

Highest Safety

HDT Rotary Field Indicator

- Rotary Field Indicator with phase indication
- Highest Safety CAT IV / 1000 V
- Especially designed for utilization by electrical supply companies (i.e. generators, windmills, solar energy converters,...)
- Incl. CAT IV - Test Leads, - Crocodil Clamps and Test Probes
- Safety acc. IEC/EN 61010, IEC/EN 61557-7

Technical Data

Voltage Range	100...1000 V AC
Frequency Range	50...400 Hz
Indication	6 LED
Test Current	< 3,5 mA
Duration Time (DT)	continous operation
Pollution Degree	2
Measurement Cat.	CAT IV / 1000 V
Safety	IEC/EN 61010, IEC/EN 61557-7
Power Supply	without batteries
Dimension	approx. 210 x 105 x 40 mm
Weight	approx. 350 g



Scope of Supply

HDT Rotary Field Indicator CAT IV
 Test Leads
 Test Probes
 Crocodil Clamp
 Instruction Manual

Order Information

Description	Cat. No.
HDT Rotary Field Indicator CAT IV	8120

Highest Safety
 CAT IV

OPTIONS

Packaging	Gift Box	Sliding Blister
	4-color	4-color
	Neutral white	Neutral white
Instruction Manual	with specific customer data	

Easy to use



ThermStick 6201

Dig. Mini-Thermometer with Liquid / Needle Probe

- Integrated Data Hold
- Compact Construction
- Protective Sleeve included

Technical Data

Display	LCD, 3 1/2 digit, 1999 Digit	
Measurement Range	-50 °C...250 °C	
Range	Resolution	Accuracy
-50 °...-20 °C	1 °C	± 3 °C
-19,9 °...+49,9 °C	0,1 °C	± 2 °C
+50,0 °...199,9 °C	0,1 °C	± (3 % rdg. + 1 °C)
+200 °...250 °C	1 °C	± (3 % rdg. + 1 °C)
Temperature change/ Response time	> 5 K/s	
Power Supply	1 x 3 V, CR 2032	
Dimensions (with protective sleeve)	approx. 40 x 30 x 160 mm	
Weight	approx. 16 g	

Scope of Supply

- 1 pc HDT ThermStick 6201
- 1 pc Battery 3 V, CR 2032
- 1 pc Protective Sleeve
- 1 pc Instruction Manual

Order Information

Description	Cat. No.
HDT ThermStick	6201

OPTIONS

Packaging	Gift Box	Sliding Blister
	4-color	4-color
	Neutral white	Neutral white
Instruction Manual	with specific customer data	

ThermStick 6202

Dig. Mini-Thermometer with Surface Probe

- Integrated Data Hold
- Compact Construction

Technical Data

Display	LCD, 3 1/2 digit, 1999 Digit	
Measurement Range	-50 °C...250 °C	
Range	Resolution	Accuracy
-50 °...-20 °C	1 °C	± 3 °C
-19,9 °...+49,9 °C	0,1 °C	± 2 °C
+50,0 °...199,9 °C	0,1 °C	± (3 % rdg. + 1 °C)
+200 °...250 °C	1 °C	± (3 % rdg. + 1 °C)
Temperature change/ Response time	> 5 K/s	
Power Supply	1 x 3 V, CR 2032	
Dimensions (with protective sleeve)	approx. 40 x 30 x 160 mm	
Weight	approx. 16 g	

Fast and accurate



Scope of Supply

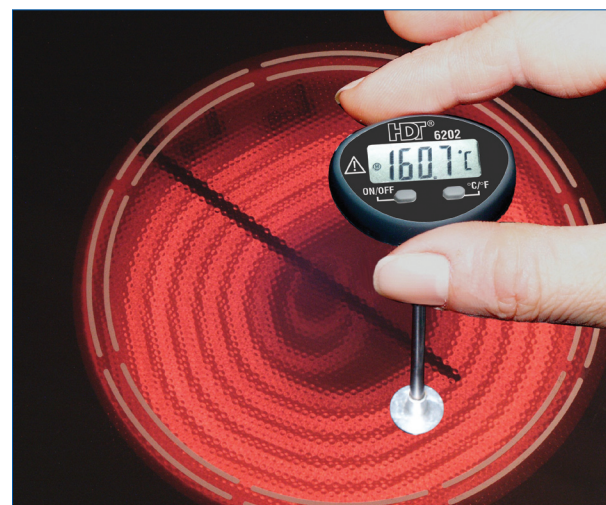
- 1 pc HDT ThermStick 6202
- 1 pc Battery 3 V, CR 2032
- 1 pc Instruction Manual

Order Information

Description	Cat. No.
HDT ThermStick	6202

OPTIONS

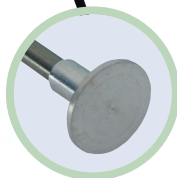
Packaging	Gift Box	Sliding Blister
	4-color	4-color
	Neutral white	Neutral white
Instruction Manual	with specific customer data	



Adjustable Limit



Cat.No. 6005



Cat.No. 6006

ThermOn 6005

Digital Thermometer with integrated Temperature Probe

- Adjustable limit
- Integrated Data Hold
- For measurement in °C or °F

Technical Data

Display	LCD, 3 ¹ / ₂ digit, 1999 Digit	
Measurement Range	-50 °C...250 °C / -58 °F...482 °F	
Range	Resolution	Accuracy
-50 °...-20 °C	1 °C	± 3 °C
-19,9 °...+49,9 °C	0,1 °C	± 2 °C
+50,0 °...199,9 °C	0,1 °C	± (3 % rdg. + 1 °C)
+200 °...250 °C	1 °C	± (3 % rdg. + 1 °C)
-58 °...-4 °F	1 °F	± 6 °F
-4 °...+122 °F	0,1 °F	± 2 °F
+122 °...200 °F	0,1 °F	± (3 % rdg. + 2 °F)
+200 °...482 °F	1 °F	± (3 % rdg. + 2 °F)
Temperature Change/		
Response Time	> 5 K/s	
Power Supply	1 x 3 V, CR2032	
Dimensions	approx. 80 x 120 x 18 mm	
Weight	approx. 150 g	

Scope of Supply

- 1 pc HDT ThermOn
- 1 pc Battery 3 V, CR 2032
- 1 pc Instruction manual

Order Information

Description	Cat. No.
HDT ThermOn	6005
HDT ThermOn	6006

OPTIONS

Packaging	Gift Box	Sliding Blister
	4-color	4-color
	Neutral white	Neutral white
Instruction Manual	with specific customer data	

HDT LampTester 7100

HDT LampTester

- Handy test instrument for swift fault finding in all gas-filled low pressure and high pressure discharge lamps
- For fluorescent lamps the test is carried out without disassembling the UUT
- Built-in continuity tester for chokes, coils, resistors, capacitors, etc. with optic and acoustic display
- Integrated single-pole voltage tester
- The test procedure consists of the comparison between new item and UUT
- Optic and acoustic display for continuity and voltage
- Additional built-in torch light

Technical Data

Voltage	approx. 3 kV
Test Frequency	approx. 160 kHz
Field Strength	approx. 100 μ V / m
Continuity Range	0...3 M Ω
Test Current	< 7 A
Voltage Indication	LED, acoustical
Voltage Range	60...250 V AC
Frequency	40...60 Hz
Measurement Cat.	CAT II / 300 V
Pollution Degree	2
Safety	IEC 61010
Dimension	255x60x40 mm
Weight	approx. 170 g

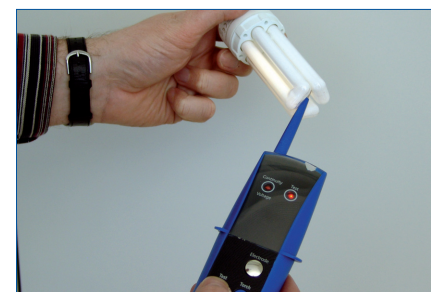
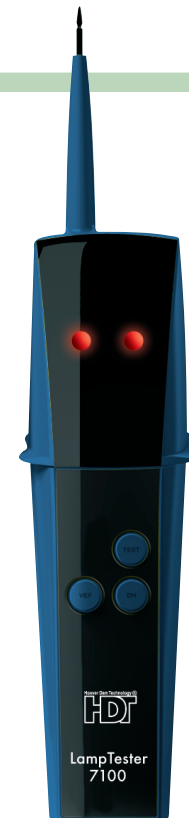
Scope of Supply

- 1 pc. Lamp Tester
- 1 pc. Battery 9V
- 1 pc. Instruction manual

Order Information

Description	Cat. No.
HDT Lamp Tester	7100

unique



OPTIONS

Packaging	Gift Box	Sliding Blister
	4-color Neutral white	4-color Neutral white
Instruction Manual	with specific customer data	



Imitation Leather Carrying Case 4002



Imitation Leather Carrying Case

- Standard colour: black

Technical Data

Material	Imitation leather
Dimension	approx. 130 x 190 x 50 mm

Scope of Supply

1 pc HDT Carrying Case 4002

Order Information

Description	Cat. No.
HDT Carrying Case	4002

Durable Nylon Carrying Case 4014



Durable Nylon Carrying Case

- Standard colour: black
- Embroidery optional

Technical Data

Material	Durable nylon
Dimension	approx. 190 x 125 x 50 mm

Scope of Supply

1 pc HDT Carrying Case 4014

Order Information

Description	Cat. No.
HDT Carrying Case	4014

Durable Nylon Carrying Case 4015



Durable Nylon Carrying Case

- Standard colour: black
- Embroidery optional

Technical Data

Material	Durable nylon
Dimension	approx. 235 x 165 x 50 mm

Scope of Supply

1 pc HDT Carrying Case 4015

Order Information

Description	Cat. No.
HDT Carrying Case	4015

Durable Nylon Carrying Case 4034

Durable Nylon Carrying Case

- Standard colour: black
- Embroidery optional

Technical Data

Material Durable nylon
 Dimension approx. 295 x 85 x 50 mm

Scope of Supply

1 pc HDT Carrying Case 4034

Order Information

Description	Cat. No.
HDT Carrying Case	4034



Durable Nylon Carrying Case 4017

Durable Nylon Carrying Case

- Standard colour: black
- Embroidery optional

Technical Data

Material Durable nylon
 Dimension approx. 195 x 80 x 50 mm

Scope of Supply

1 pc HDT Carrying Case 4017

Order Information

Description	Cat. No.
HDT Carrying Case	4017



Durable Nylon Carrying Case 4018

Durable Nylon Carrying Case

- Standard colour: black
- Embroidery optional

Technical Data

Material Durable nylon
 Dimension approx. 125 x 90 x 22 mm

Scope of Supply

1 pc HDT Carrying Case 4018

Order Information

Description	Cat. No.
HDT Carrying Case	4018



Durable Nylon Carrying Case 4019



Durable Nylon Carrying Case

- Standard colour: black
- Embroidery optional

Technical Data

Material Durable nylon
 Dimension approx. 190 x 125 x 50 mm

Scope of Supply

1 pc HDT Carrying Case 4019

Order Information

Description	Cat. No.
HDT Carrying Case	4019

Durable Nylon Carrying Case 4021



Durable Nylon Carrying Case

- Standard colour: black
- Embroidery optional

Technical Data

Material Durable nylon
 Dimension approx. 220 x 170 x 50 mm

Scope of Supply

1 pc HDT Carrying Case 4021

Order Information

Description	Cat. No.
HDT Carrying Case	4021

Durable Nylon Carrying Case 4023



Durable Nylon Carrying Case

- Standard colour: black
- Embroidery optional

Technical Data

Material Durable nylon
 Dimension approx. 410 x 320 x 140 mm

Scope of Supply

1 pc HDT Carrying Case 4023

Order Information

Description	Cat. No.
HDT Carrying Case	4023

Carrying Case 4600

Aluminium Carrying Case

- With universal Foam Inlay

Technical Data

Material	Aluminium
Carrying Case 4600	
Dimension	approx. 365 x 285 x 132 mm
Carrying Case 4601	
Dimension	approx. 460 x 330 x 150 mm

Robust carrying case



INFORMATION

customized foam inlay on request.

Scope of Supply

1 pc HDT Carrying Case 4600
or
1 pc HDT Carrying Case 4601

Order Information

Description	Cat. No.
HDT Carrying Case	4600
HDT Carrying Case	4601

OPTIONS

Packaging	Gift Box	Sliding Blister
	n/a	n/a
	Neutral white	n/a
Instruction Manual	n/a	



without content

Flexible Wire Probes - k-type -



Flexible Wire Probe

Temperature Range	-50 °C...+400 °C
Response Time	approx. 5,0 s (63,2 % of final temperature value)
Accuracy	(± 1,5 °C)
Dimensions	1000 x 2 mm
Weight	approx. 22 g



Cat.No. 1006 -
4 mm plugs for i.e. multimeters



Cat.No. 1007 - k-type plug



Cat.No. 1008 - k-type plug

INFORMATION

Other lengths, temperature ranges and insulation materials on request

Order Information	
Description	Cat. No.
HDT Wire Probe	1005
HDT Wire Probe	1006
HDT Wire Probe	1008

OPTIONS

Packaging	Gift Box	Sliding Blister
	n/a	n/a
	n/a	n/a
Instruction Manual	n/a	

PS 10, PS 20, PS 30

for Standard Rail 35 mm

Standard Rail Power Units for Standard Rail 35 mm

- Linear controlled short-circuit protected power supplies for control circuits and electrical installations up to 24 W
- Applicable for fast mounting and screw mounting
- Swift and easy mounting Thermal overload protection



PS 10 (max. 3.6 W)



PS 20 (max. 10.8 W)



PS 30 (max. 24 W)

Technical Data

Modell	PS 10	PS 20	PS 30
Output Power	max. 3.6 W	max. 10.8 W	max. 24 W
Output Voltage:		5 V/12 V/24 V*	
Output Current:	max. 0.15 A	max. 0.9 A*	max. 2 A*
Ripple:	< 25 mVss	< 25 mVss	< 25 mVss
Load regulation (0...100 %):	< 1 %	< 1 %	< 1 %
Temperature Drift:	400 ppm/K	400 ppm/K	400 ppm/K
Nominal Temperatur Range:		+ 15 °C...+40 °C	
Protection Class:	II	II	II
Nominal Voltage:		230 V ± 10 %, 50...60 Hz	
Power Consumption:	approx. 60 mA	approx. 150 mA	approx. 240 mA
Dimension W x H x D:	78 x 55 x 112 mm	100 x 78 x 114 mm	150 x 77 x 114 mm
Weight:	approx. 0.4 kg	approx. 0.8 kg	approx. 1.4 kg

*depending on version

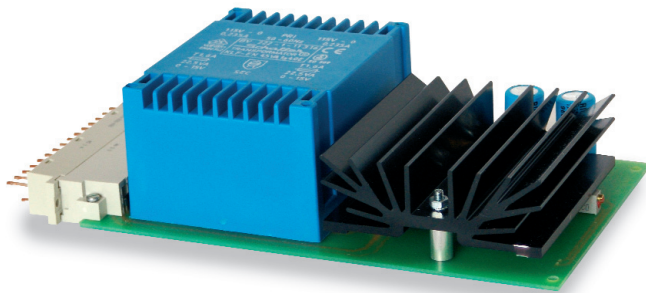
Order information

Model	Technical Data	Output	Cat. No.
PS 10	max. 3.6 W	24 V/0.15 A	10010
PS 20	max. 10.8 W	12 V/0.9 A	10020
PS 20	max. 10.8 W	24 V/0.45 A	10030
PS 30	max. 10 W	5 V/2.0 A	10040
PS 30	max. 18 W	12 V/1.5 A	10050
PS 30	max. 24 W	24 V/1.0 A	10060

Other voltage and current values on request!

for 19" Card Cage

PS 110, PS 120



Power Supply Plug-In Cards for 19" Card Cages

- Linear controlled short-circuit protected power supply on EURO-board (160 x 100 mm)
- Swift and easy mounting
- 32-pole connections via multi-point connector
- Short-circuit and thermal overload protection

Technical Data

Modell	PS 110	PS 120
Output Power	max. 24 W	max. 2 x 15 W
Output Voltage:	depending on version	adjustable
Output Current:	max. 2 A	max. 2 x 1 A
Ripple:	max. 15 mVss	
Load regulation (0...100 %):	< (0.5 %...2 %) depending on type	
Temperature Drift:	400 ppm/K	400 ppm/K
Nominal Temperatur:	+ 15 °C...+ 40 °C	
Input Voltage:	230V ± 10 %, 50...60 Hz	
Dimensions:	Euro-board, max height. 50 mm	
Weight:	approx. 1.2 kg	approx. 1.3 kg

Order information

Model	Technical Data	Output	Cat. No.
PS 110	max. 10 W	5 V/2.0 A	10110
PS 110	max. 18 W	12 V/1.5 A	10120
PS 110	max. 22.5 W	15 V/1.5 A	10130
PS 110	max. 24 W	24 V/1.0 A	10140
PS 120	max. 12 W	±(15...24 V)/0.5 A	10150
PS 120	max. 15 W	±(12...15 V)/1.0 A	10160

Other voltage and current values on request!

power^{ON} LAB 100

the universal power supply

Single Output Laboratory Power Supply 0...30 V/0...3 A

- Linear controlled DC laboratory power supply with max. 90 W output power Multipurpose constant voltage or constant current source
- Switchable display
- LED display for constant current mode
- Standard integrated measurement input for measuring external DC voltages replaces additional digital voltmeter
- Output setting via 10-turn potentiometer

Technical Data

Output Voltage:	0...30 V (infinitely adjustable)
Output Current:	5 mA...3 A (infinitely adjustable)
Constant voltage mode	
Ripple/Recovery Time (0 - 100 %):	< 2 mVss/< 50µs
Constant current mode	
Ripple/Recovery Time (0 - 100 %):	< 6 mA _{ss} /< 400 µs
Digital Display (3 digit):	
Internal Voltage Display	
Range/Resolution:	0...99.9 V/100 mV
Current display	
A-Range/Resolution:	0...9.99 A/10 mA
mA-Range/Resolution:	0...999 mA/1 mA
External Voltage Range	
Range/Resolution:	- 9.9 V...+ 99.9 V/100 mV
Temperature Drift:	100 ppm/K
Nominal Temperatur:	+ 15 °C...+ 40 °C
Protection Class:	I
Nominal Voltage:	230 V ± 10 %, 50...60 Hz
Power Consumption:	approx. 0.8 A
Dimension W x H x D:	176 x 131 x 245 mm
Weight:	approx. 5 kg



Order information

Model	Description	Cat. No.
LAB 100	Basic	11010
LAB 100 F	Basic with fine adjustment locks	11020
LAB 100 A	Basic with analogue control input	11030
LAB 100 A/F	Basic with control input and fine adjustment locks	11040

for training purposes

power^{ON} LAB 100 KIT



Single Output Laboratory Power Supply 0...30 V/0...3 A

- Linear controlled DC laboratory power supply with max. 90 W output power
- Multipurpose constant voltage or constant current source
- Switchable display
- LED display for constant current mode
- Standard integrated measurement input for measuring external DC voltages replaces additional digital voltmeter
- Output setting via 10-turn potentiometer
- Power Supply kit version with a valuable, self-explanatory

Technical Data

Output Voltage:	0...30 V (infinitely adjustable)
Output Current:	5 mA...3 A (infinitely adjustable)
Constant voltage mode	
Ripple/Recovery Time (0 - 100 %):	< 2 mVss/< 50 μs
Constant current mode	
Ripple/Recovery Time (0 - 100 %):	< 6 mAss/< 400 μs
Digital Display (3 digit):	
Internal Voltage Display	
Range/Resolution:	0...99.9 V/100 mV
Current display	
A-Range/Resolution:	0...9.99 A/10 mA
mA-Range/Resolution:	0...999 mA/1 mA
External Voltage Range	
Range/Resolution:	- 9.9 V...+ 99.9 V/100 mV
Temperature Drift:	100 ppm/K
Nominal Temperatur:	+ 15 °C...+ 40 °C
Protection Class:	I
Nominal Voltage:	230V ± 10 %, 50...60 Hz
Power Consumption:	approx. 0.8 A
Dimension W x H x D:	176 x 131 x 245 mm
Weight:	approx. 5 kg

Tip

Ideal for the practical education to vocational schools and teaching workshops.

Order information

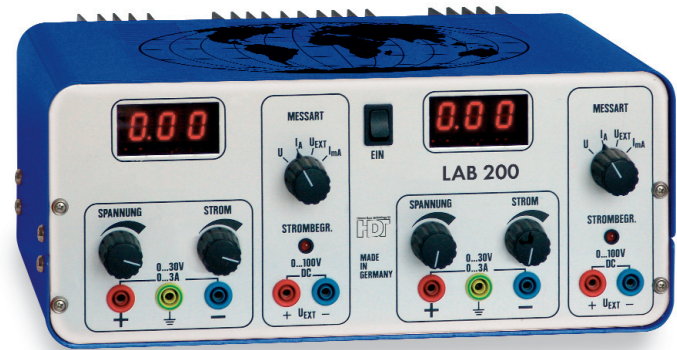
Model	Description	Cat. No.
LAB 100 B	Basic	11050

power^{ON} LAB 200

Two outputs 0...30 V

Double Output Laboratory Power Supply 2 x 0...30 V/0...3 A

- Linear controlled DC laboratory power supply with max. 2 x 90 W output power
- Multipurpose constant voltage or constant current source
- Switchable display
- LED display for constant current mode
- Standard integrated measurement input for measuring external DC voltages replaces additional digital voltmeter
- Output value setting via 10-turn potentiometer
- Outputs connectable in series or parallel



Technical Data

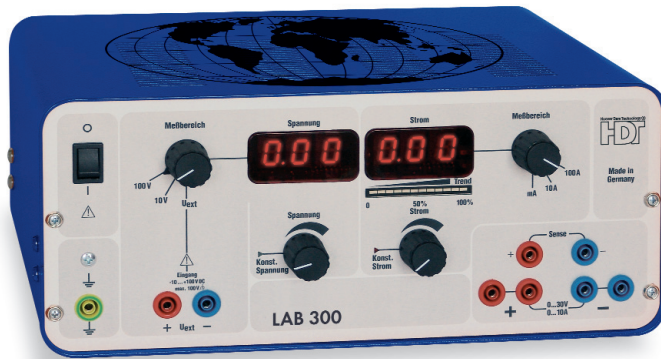
Output Voltage:	2 x 0...30 V (infinitely adjustable)
Output Current:	2 x 5 mA...3 A (infinitely adjustable)
Constant voltage mode	
Ripple/Recovery Time (0 - 100 %):	< 2 mVss/< 50µs
Constant current mode	
Ripple/Recovery Time (0 - 100 %):	< 6 mAss/< 400 µs
Digital Display (3 digit):	
Internal Voltage Display	
Range/Resolution:	0...99.9 V/100 mV
Current display	
A-Range/Resolution:	0...9.99 A/10 mA
mA-Range/Resolution:	0...999 mA/1 mA
External Voltage Range	
Range/Resolution:	- 9.9 V...+ 99.9 V/100 mV
Temperature Drift:	100 ppm/K
Nominal Temperatur:	+ 15 °C...+ 40 °C
Protection Class:	I
Nominal Voltage:	230V ± 10 %, 50...60 Hz
Power Consumption:	approx. 1.6 A
Dimension W x H x D:	326 x 135 x 225 mm
Weight:	approx. 9 kg

Order information

Model	Description	Cat. No.
LAB 200	Basic	11060
LAB 200 F	Basic with fine adjustment locks	11070
LAB 200 A	Basic with analogue control input	11080
LAB 200 A/F	Basic with control input and fine adjustment locks	11090

Output 300 W

power^{ON} LAB 300-Series



LAB 330: 0...30 V / 0...10 A

LAB 360: 0...60 V / 0...5 A

Tip

Particularly suitable at 42 V motor vehicle onboard power supplies

Single Output Laboratory Power Supply

- Linear controlled DC laboratory power supply with max. 300 W output power
- Multipurpose constant voltage or constant current source
- Switchable display and additional current trend indication
- LED display for constant current and constant voltage mode
- Standard integrated measurement input for measuring external DC voltages replaces additional digital voltmeter
- Output value setting via 10-turn potentiometer
- Outputs connectable in series or parallel
- Automatic sense leads for compensating voltage drops

Technical Data

Output Voltage:	0...30 V/0...60 V (infinitely adjustable)
Output Current:	10 mA...10 A/10 mA...5 A (infinitely adjustable)
Constant voltage mode	
Ripple/Recovery Time (0 - 100 %):	< 20 (25) mVss/< 50 μs
Constant current mode	
Ripple/Recovery Time (0 - 100 %):	< 50 mAss/< 100 μs
Digital Display (3 digit):	
Internal Voltage Display	
100 V-Range/Resolution:	0...99.9 V/100 mV
10 V-Range/Resolution:	0...9.99 V/10 mV
Current display	
100 A-Range/Resolution:	0...99.9 A/100 mA
10 A-Range/Resolution:	0...9.99 A/10 mA
1 A-Range/Resolution:	0...999 mA/1 mA
External Voltage Range	
Range/Resolution:	- 9.9 V...+ 99.9 V/100 mV
Temperature Drift:	100 ppm/K
Nominal Temperatur:	+ 15 °C...+ 40 °C
Protection Class:	I
Nominal Voltage:	230 V ±10 %, 50...60 Hz
Power Consumption:	approx. 2.6 A
Dimension W x H x D:	326 x 131 x 245 mm
Weight:	approx. 11 kg

Order information

Model	Technical Data	Description	Cat. No.
LAB 330	0...30 V/0...10 A	Basic	11100
LAB 330 F	0...30 V/0...10 A	Basic with fine adjustment lock	11110
LAB 330 A	0...30 V/0...10 A	Basic with analogue control input	11120
LAB 330 A/F	0...30 V/0...10 A	Basic with control input and fine adjustment locks	11130
LAB 360	0...60 V/0...5 A	Basic	11140
LAB 360 F	0...60 V/0...5 A	Basic with fine adjustment lock	11150
LAB 360 A	0...60 V/0...5 A	Basic with analogue control input	11160
LAB 360 A/F	0...60 V/0...5 A	Basic with control input and fine adjustment locks	11170

power^{ON} LAB 400

The complete one

Multiple Output Laboratory Power Supply with Constant Voltage Outputs

- Linear controlled DC laboratory power supply with max. 150 W output power
- Multipurpose constant voltage or constant current source
- Switchable display and additional current trend indication
- LED display for constant current mode
- Standard integrated measurement input for measuring external DC voltages replaces additional digital voltmeter
- Output value setting via 10-turn potentiometer
- User orientated combination of one adjustable DC voltage output and four constant voltage outputs



Technical Data

Output Voltage:	0...30 V (infinitely adjustable)
Output Current:	5 mA...3 A (infinitely adjustable)
Constant voltage mode	
Ripple/Recovery Time (0 - 100 %):	< 2 mVss/< 50 μ s
Constant current mode	
Ripple/Recovery Time (0 - 100 %):	< 6 mAss/< 400 μ s
Constant voltage output 1 (DC):	+ 12 V/1 A oder + 15 V/1 A switchable
Ripple/Recovery Time (0 - 100 %):	< 5 mVss/< 100 μ s
Constant voltage output 2 (DC):	- 12 V/1 A oder - 15 V/1 A switchable
Ripple/Recovery Time (0 - 100 %):	< 5 mVss/< 100 μ s
Constant voltage output 3 (DC):	+ 5 V/5 A
Ripple/Recovery Time (0 - 100 %):	< 5 mVss/< 150 μ s
Constant voltage output 4 (DC):	- 5 V/1 A
Ripple/Recovery Time (0 - 100 %):	< 5 mVss/< 100 μ s
Digital Display (3 digit):	
Internal Voltage Display	
Range/Resolution:	0...99.9 V/100 mV
Current display	
10 A-Range/Resolution:	0...9.99 A/10 mA
1 A-Range/Resolution:	0...999 mA/1 mA
External Voltage Range	
Range/Resolution:	- 9.9 V...+ 99.9 V/100 mV
Temperature Drift:	100 ppm/K
Nominal Temperatur:	+ 15 °C...+ 40 °C
Protection Class:	I
Nominal Voltage:	230 V \pm 10 %, 50...60 Hz
Power Consumption:	approx. 1.7 A
Dimension W x H x D:	326 x 135 x 225 mm
Weight:	approx. 9.5 kg

Order information

Model	Description	Cat. No.
LAB 400	Basic	11180
LAB 400 F	Basic with fine adjustment locks	11190
LAB 400 A	Basic with analogue control input	11200
LAB 400 A/F	Basic with control input and fine adjustment locks	11210

2 x 90 W output

power^{ON} LAB 500



Triple Output Laboratory Power Supply

- Linear controlled DC laboratory power supply with max. 2 x 90 W output power
- Multipurpose constant voltage or constant current source
- Switchable display
- LED display for constant current mode
- Standard integrated measurement input for measuring external DC voltages replaces additional digital voltmeter
- Output value setting via 10-turn potentiometer
- Outputs connectable in series or parallel
- Additional 5 V/3 A constant voltage output with current fold-back and LED display

Technical Data

Output Voltage:	2 x 0...30 V (infinitely adjustable)
Output Current:	2 x 5 mA...3 A (infinitely adjustable)
Constant voltage mode	
Ripple/Recovery Time (0 - 100 %):	< 2 mVss/< 50 μs
Konstantstrombetrieb	
Ripple/Recovery Time (0 - 100 %):	< 6 mAss/< 400 μs
Constant voltage output	5 V/3 A
Ripple/Recovery Time (0 - 100 %):	< 5 mVss/< 50 μs
Digital Display (3 digit):	
Internal Voltage Display	
Range/Resolution:	0...99.9 V/100 mV
Current display	
A-Range/Resolution:	0...9.99 A/10 mA
mA-Range/Resolution:	0...999 mA/1 mA
External Voltage Range	
Range/Resolution:	-9.9 V...+99.9 V/100 mV
Temperature Drift:	100 ppm/K
Nominal Temperatur:	+15 °C...+40 °C
Protection Class:	I
Nominal Voltage:	230 V ± 10 %, 50...60 Hz
Power Consumption:	approx. 1.9 A
Dimension W x H x D:	326 x 135 x 225 mm
Weight:	approx. 10 kg

Order information

Model	Description	Cat. No.
LAB 500	Basic	11220
LAB 500 F	Basic with fine adjustment locks	11230
LAB 500 A	Basic with analogue control input	11240
LAB 500 A/F	Basic with control input and fine adjustment locks	11250

power^{ON} LAB 600

0...42 V-AC output additional

Double Output Laboratory Power Supply

- Linear controlled AC and DC laboratory power supply with max. 200 W AC output power
- Multipurpose constant voltage or constant current source
- Switchable display
- LED display for constant current mode
- Standard integrated measurement input for measuring external DC voltages replaces additional digital voltmeter
- Output value setting via 10-turn potentiometer
- Outputs connectable in series or parallel
- Variable insulated transformer with over current protection



Technical Data

Output Voltage:	0...30 V (infinitely adjustable)
Output Current:	5 mA...5 A (infinitely adjustable)
Constant voltage mode	
Ripple/Recovery Time (0 - 100 %):	< 10 mVss/< 50µs
Constant current mode	
Ripple/Recovery Time (0 - 100 %):	< 6 mAss/< 400 µs
AC Voltage Output:	0...42 V (infinitely adjustable)
AC Output Current:	max. 5 A eff
Fuse:	5 A lag
Digital Display (3 digit):	
Internal Voltage Display	
Range/Resolution:	0...99.9 V/100 mV
Current display	
10-A-Range/Resolution:	0...9.99 A/10 mA
External Voltage Range	
Range/Resolution:	-9.9 V...+99.9 V/100 mV
Temperature Drift:	100 ppm/K
Nominal Temperatur:	+ 15 °C...+ 40 °C
Protection Class:	I
Nominal Voltage:	230V ± 10 %, 50...60 Hz
Power Consumption:	approx. 2.3 A
Dimension W x H x D:	326 x 135 x 225
Weight:	approx. 14 kg

Order information

Model	Description	Cat. No.
LAB 600	Basic	11260
LAB 600 F	Basic with fine adjustment locks (DC)	11270
LAB 600 A	Basic with analogue control input (DC)	11280
LAB 600 A/F	Basic with control input and fine adjustment locks (DC)	11290

Infinitely adjustable

power^{ON} LAB 700



Insulated Adjustable Transformer

- Insulated transformer with infinitely adjustable output voltage
- Display of current and voltage via large analogue displays
- Overload protection via automatic circuit breaker
- Stackable due to flat carrying handle
- For applications in laboratories, service workshops and technical training

Technical Data

Output Voltage:	0...245 V AC
Output Current:	max. 3.1 A AC
Display Voltage:	0...250 V eff
Display Current:	0...4 A eff
Nominal Temperatur Range:	+20...+ 40 °C
Protection Class:	I
Nominal Voltage:	230 V/50...60 Hz
Power Consumption:	max. 6 A
Dimension W x H x D:	228 x 220 x 225 mm
Weight:	approx. 11 kg

Order information

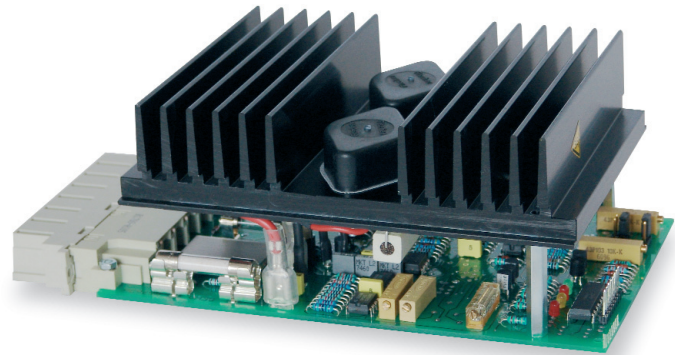
Model	Description	Cat. No.
LAB 700	Basic	11300

power^{ON} VEL 50

19" card cage

Electronic Load in 19" card cage

- Electronic load 19" card cage installation up to 50 W
- Internal power limitation and further comprehensive protective features
- Especially designed for burn-in tests
- Multipurpose application with constant current and constant resistance operation
- Analogue control input for constant current pre-setting



Technical Data

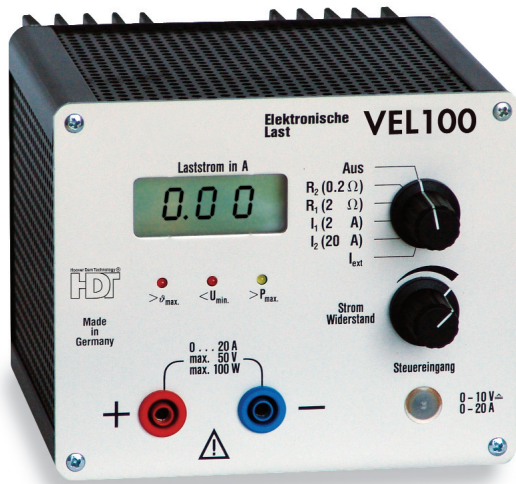
Standard version:	50 V/10 A
Max. Power:	50 W
Load Voltage:	5...50 V
Constant current mode:	
Range/Resolution:	approx. 50 mA...10 A/<10 mA
Constant Resistance Mode:	
Range	approx. (100 Ω ...500 m Ω)
Current Rise Time (0...100 %):	< 60 μ s
Current Stability:	< 0.25 % (8h)
Cooling:	convection cooling
Nominal Temperatur Range:	+15 °C...+40 °C
Power Supply:	from UUT or 5 V DC/35 mA
Power Consumption:	approx. 1 VA
Dimension W x H x D:	Euro board 100x 160 mm 14TE
Weight:	approx. 1 kg

Order information

Model	Technical Data	Description	Cat. No.
VEL 50	5...50V/0...10 A	Basic	12010
VEL 50 U	5...50V/0...10 A	Basic with undervoltage switch off	12020

Ideal electronic load up to 100 W

power^{ON} VEL 100



Electronic Load

- Mains independent electronic load with battery operation up to 100 W
- LCD display for load current and LED control display for respective operation mode
- Constant current and resistance mode in two ranges infinitely adjustable via high resolution 10-turn potentiometers
- The load is equipped with internal power limitation and further comprehensive protections
- Replaces a range of many large load resistors
- Ideal load e.g. for training companies and electronic development departments
- Analogue control input for constant current presetting

Technical Data

Standard version:	50 V/20 A
Max. Power:	100 W
Load Voltage:	1...50 V
Constant current mode:	
Range 1/Resolution	1 mA...20 A/< 10 mA
Range 2/Resolution	1 mA...2 A/< 1 mA
Constant Resistance Mode:	
Range 1	approx. (15 kΩ...0.3 Ω)
Range 2	approx. (25 kΩ...3 Ω)
Current Rise Time (0...100 %):	< 60 μs
Current Stability:	< 0.25 % (8 h)
3 ¹ / ₂ digit LCD for Load Current:	
Range/Resolution:	0...19.99 A/10 mA
Cooling:	convection cooling
Nominal Temperatur:	+15 °C...+40 °C
Power Supply:	9-V-Block IEC 6LR61/ Power Supply (option)
Power Consumption:	approx. 15 mA
Dimension W x H x D:	140 x 115 x 175 mm
Weight:	approx. 1.5 kg



Power Supply Unit for VEL 100

Cat. No. 13000

Order information

Model	Technical Data	Description	Cat. No.
VEL 100	1...50 V/0...20 A	Basic	12030
VEL 100 U	1...50 V/0...20 A	Basic with undervoltage switch off	12040
Power Supply Unit for VEL 100			13000

μ-Load ML50

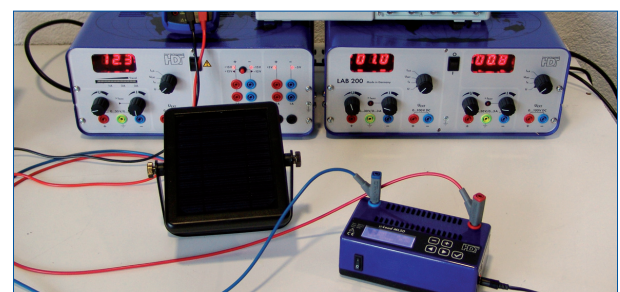
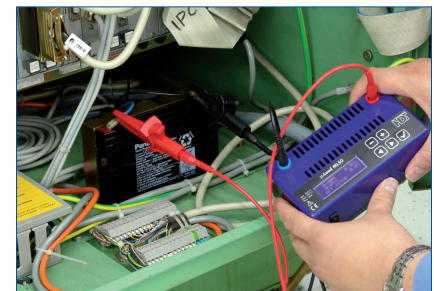
Electronic Load

- Electronic load up to 50 W
- Current mode, resistance mode or power mode
- Indication of voltage, current and power
- Off-line use with integrated rechargeable battery
- Adjustable undervoltage switch-off
- Replaces load resistors and variable resistors
- For battery and rechargeable batteries testing
- Programmable constant current source together with a power supply
- Control of Electronic Load via USB interface
- Test of solar cells, fuel cells etc.



Technical Data

Display	LC text display, with backlight
Voltage	max. 50 V DC
Current	max. 20 A DC
Power	max. 50 W
Load voltage	1 V...50 V
Load current	10 mA...20 A
Resistance	1 Ω... 5 kΩ
Undervoltage switch-off	0...49.9 V
Nominal Temperature Range	0°C...+40°C
Interface	USB
Power Supply	Internal rechargeable batteries 7.5 V DC power supply unit
Dimensions	approx. 150 x 80 x 50 mm
Weight	approx. 550 g



Order information

Model

μ-Load ML50

Cat. No.

12190

Electronic load up to 250 W

power^{ON} VEL 250



Electronic Load

- Electronic load bench version up to 250 W
- Two separate digital displays for load voltage and current
- Constant current and resistance mode in two ranges infinitely adjustable via high resolution 10-turn potentiometers
- Analogue control input for constant current pre-setting
- Adjustable pulse load operation with 100 Hz and 1 kHz enables easy dynamic UUT load application
- Internal power limitation and further comprehensive protective features
- Electronic loads for applications in research and testing (e.g. solar engineering)
- Integrated current monitor output enables control and recording of load current via external measurement instrument, such as recorder or oscilloscope

Technical Data

Standard version:	60 V/40A
Max. Power:	250 W
Load Voltage:	1...60 V
Constant current mode:	
Range/Resolution:	5 mA...40 A / < 20 mA
Constant Resistance Mode:	
Range	approx. (200 Ω...100 mΩ)
Current Rise Time (0 . . . 100 %):	< 60 μs
Current Stability:	< 0.25 % (8 h)
3 digit LCD for Load Current:	
Range/Resolution:	-9.9...99.9 A/100 mA
Range/Resolution:	-9.9...99.9 V/100 mV
Cooling:	electronic controlled fan system
Nominal Temperatur:	+15 °C...+40 °C
Power Supply:	230V ±10 % / 50 - 60 Hz
Power Consumption:	approx. 18 VA
Dimension W x H x D:	326 x 144 x 240 mm
Weight:	approx. 6 kg

Tip

Additional constant power mode and constant voltage mode by the optional RPU module.

Order information

Model	Technical Data	Description	Cat. No.
VEL 250	1...60V/0...40 A	Basic	12050
VEL 250 R	1...60V/0...40 A	Basic with RPU module	12060

power^{ON} VEL 500

Electronic load up to 500 W

Electronic Load

- Electronic load bench version up to 500 W
- Two separate digital displays for load voltage and current
- Constant current and resistance mode in two ranges infinitely adjustable via high resolution 10-turn potentiometers
- Analogue control input for constant current pre-setting
- Adjustable pulse load operation with 100 Hz and 1 kHz enables easy dynamic UUT load application
- Internal power limitation and further comprehensive protective features
- Electronic loads for applications in research and testing (e.g. solar engineering)
- Integrated current monitor output enables control and recording of load current via external measurement instrument, such as recorder or oscilloscope
- IEE-488 interface for integration in computer controlled systems (option)



Technical Data

Standard version:	60 V/50A
Max. Power:	500 W
Load Voltage:	1...60 V
Constant current mode:	
Range/Resolution:	5 mA...50 A / < 20 mA
Constant Resistance Mode:	
Range	approx. (400 Ω...100 mΩ)
Current Rise Time (0 ... 100 %):	< 60 μs
Current Stability:	< 0.25 % (8h)
3 digit LCD for Load Current:	
Range/Resolution:	-9.9...99.9 A/100 mA
Range/Resolution:	-9.9...99.9 V/100 mV
Cooling:	electronic controlled fan system
Nominal Temperatur:	+15 °C...+40 °C
Power Supply:	230V ± 10 % / 50 - 60 Hz
Power Consumption:	approx. 18 VA
Dimension W x H x D:	466 x 170 x 340 mm
Weight:	approx. 12 kg



Tip

Particularly suitable at 42 V motor vehicle onboard power supply

Order information

Model	Technical Data	Description	Cat. No.
VEL 500	1...60V/0...50 A	Basic	12070
VEL 500 R	1...60V/0...50 A	Basic with RPU module	12080
VEL 500 I	1...60V/0...50 A	Basic with IEE interface	12090
VEL 500 I/R	1...60V/0...50 A	Basic with RPU and IEE interface	12100

Electronic load up to 1000 W

power^{ON} VEL 1000



Electronic Load

- Electronic load bench version up to 1000 W
- Two separate digital displays for load voltage and current
- Constant current and resistance mode in two ranges infinitely adjustable via high resolution 10-turn potentiometers
- Analogue control input for constant current pre-setting
- Adjustable pulse load operation with 100 Hz and 1 kHz enables easy dynamic UUT load application
- Internal power limitation and further comprehensive protective features
- IEEE-488 interface for integration in computer controlled systems (optional)
- Integrated current monitor output enables control and recording of load current via external measurement instrument, such as recorder or oscilloscope
- For highest requirements in high current engineering (e.g. generator test or accumulator testing)



optional

Technical Data

Standard version:	30 V/100 A
Max. Power:	1000 W
Load Voltage:	1...30 V
Constant current mode:	
Range/Resolution:	5 mA...100 A/< 30 mA
Constant Resistance Mode:	
Range	approx. (200 Ω...40 mΩ)
Current Rise Time (0...100 %):	< 150 μs
Current Stability:	< 0.25 % (8 h)
3 digit meter for load current and load voltage	
Range/Resolution:	-99...999 A/1 A
Range/Resolution:	-9.9...99.9 V/100 mV
Cooling:	electronic controlled fan system
Nominal Temperature Range:	+15 °C...+40 °C
Power Supply:	230 V ± 10 % / 50 - 60 Hz
Power Consumption:	approx. 18 VA
Dimension W x H x D:	466 x 170 x 340 mm
Weight:	approx. 14 kg

Order information

Model	Technical Data	Description	Cat. No.
VEL 1000	1...30 V/0...100 A	Basic	12110
VEL 1000 R	1...30 V/0...100 A	Basic with RPU module	12120
VEL 1000 I	1...30 V/0...100 A	Basic with IEE interface	12130
VEL 1000 I/R	1...30 V/0...100 A	Basic with RPU and IEE interface	12140

power^{ON} VEL 2000

Electronic load up to 2000 W

Electronic Load

- Electronic load bench version up to 2000 W
- Two separate digital displays for load voltage and current
- Constant current and resistance mode in two ranges infinitely adjustable via high resolution 10-turn potentiometers
- Analogue control input for constant current pre-setting
- Adjustable pulse load operation with 100 Hz and 1 kHz enables easy dynamic UUT load application
- Internal power limitation and further comprehensive protective features
- IEEE-488 interface for integration in computer controlled systems (optional)
- Integrated current monitor output enables control and recording of load current via external measurement instrument, such as recorder or oscilloscope
- For highest requirements in high current engineering (e.g. generator test or accumulator testing)



Technical Data

Standard version:	30 V/200 A
Max. Power:	2000 W
Load Voltage:	1...30 V
Constant current mode:	
Range/Resolution:	5 mA...200 A / < 60 mA
Constant Resistance Mode:	
Range	approx. (100 Ω...20 mΩ)
Current Rise Time (0...100 %):	< 150 μs
Current Stability:	< 0.25 % (8h)
3 digit LCD for Load Current:	
Range/Resolution:	-99...999 A / 1 A
Range/Resolution:	-9.9...99.9 V / 100 mV
Cooling:	electronic controlled fan system
Nominal Temperatur Range:	+15 °C...+40 °C
Power Supply:	230 V ± 10 % / 50 - 60 Hz
Power Consumption:	approx. 50 VA
Dimension W x H x D:	466 x 285 x 400 mm
Weight:	approx. 25 kg



Order information

Model	Technical Data	Description	Cat. No.
VEL 2000	1...30 V/0...200 A	Basic	12150
VEL 2000 R	1...30 V/0...200 A	Basic with RPU module	12160
VEL 2000 I	1...30 V/0...200 A	Basic with IEE interface	12170
VEL 2000 I/R	1...30 V/0...200 A	Basic with RPU and IEE interface	12180

Resistors, Inductivities, Capacities

Deka-R, Deka-L, Deka-C



R-Decade



L-Decade



C-Decade

Decades

- Resistance Decade Deka-R
- Inductance Decade Deka-L
- Capacitance Decade Deka-C

Technical Data

Modell	Deka-R	Deka-L	Deka-C
Range:	1Ω...999.999Ω	1μH...4700μH	100 pF...9.9999 μF
Resolution:	1 Ω	-	100 pF
P _{max} :	1 W	1 W	-
Tolerance:	±(1...10% + 0.9Ω)	±(5...10%)	±(2...10%)
I _{max} :	-	60 mA	-
(switchable):	100 mA	-	-
(not switchable)::	1 A	-	-
U _{max} :		50 V AC, 75 V DC	
Dimensions:		150 x 80 x 50 mm	
Weight:	approx. 260 g	approx. 260 g	approx. 315 g

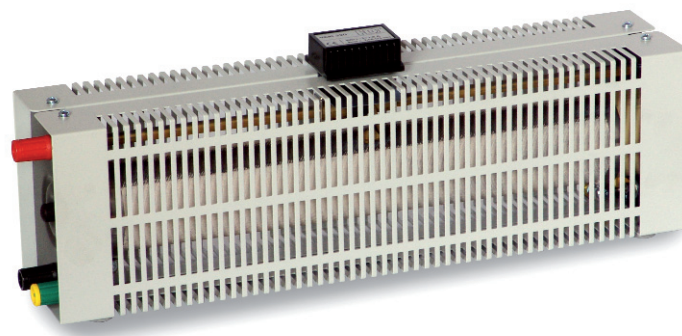
Order information

Model	Description	Cat. No.
Deka-R	Resistance Decade	14010
Deka-L	Inductance Decade	14020
Deka-C	Capacitance Decade	14030

HDT Variable Resistor VARI 320

Variable Resistor VARI 320

- Continuously Adjustable Variable Resistor
- Power up to 320 VA
- Stable metal housing
- 4 mm safety sockets with additional Earth Connector
- For schools, vocational schools, electronic laboratories, test laboratories, repair shops etc.



Technical Data

Range	1 Ω / 3.3 Ω / 10 Ω / 33 Ω / 100 Ω / 330 Ω / 1000 Ω / 3300 Ω	
Tolerance	± 10 %	
Load		
Value	durable	15 min
VARI 320 - 1 Ω	18 A	25 A
VARI 320 - 3.3 Ω	10 A	14 A
VARI 320 - 10 Ω	5,7 A	8 A
VARI 320 - 33 Ω	3,1 A	4,4 A
VARI 320 - 100 Ω	1,8 A	2,5 A
VARI 320 - 330 Ω	1,0 A	1,4 A
VARI 320 - 1000 Ω	0,57 A	0,8 A
VARI 320 - 3300 Ω	0,31 A	0,44 A
Insulation Resistor	> 3x10 ⁷	
Earth Resistance	< 0,1 Ω	
Max Voltage	max. 600 V AC/DC	
Dielectric Voltage	> 2500 V~	
Protection Class	IP 20	
Standard	EN 61010, IEC 61010	
Dimension	approx. 446 x 93 x 150 mm	
Weigth	approx. 2,85...3,25 kg	

Order information

Model	Technical Data	Description	Cat. No.
VARI 320	1 Ω	variable resistor	15070
VARI 320	3.3 Ω	variable resistor	15080
VARI 320	10 Ω	variable resistor	15010
VARI 320	33 Ω	variable resistor	15020
VARI 320	100 Ω	variable resistor	15030
VARI 320	330 Ω	variable resistor	15040
VARI 320	1000 Ω	variable resistor	15050
VARI 320	3300 Ω	variable resistor	15060

Safety Test Leads 1801

4-mm-Safety Plug System

- PVC Safety Test Leads 0,8 mm²
- Rated Current 16 A
- Measurement Category CAT III/1000 V



Order information

Cat. No.	Colour	Length/mm (approx.)
180111	red	1000
180121	black	1000

Safety Test Probe 1701

4-mm-Safety Plug System with 4-mm-Probe Tip

- Dimension approx. 11x125 mm
- Rated Current 16 A
- Measurement Category CAT III/1000 V



Order information

Cat. No.	Colour	Dim/mm (approx.)
170111	red	11 x 125
170121	black	11 x 125

Safety Crocodil Clamp 1601

4-mm-Safety Plug System

- Dim approx. 51 x 98 mm
- Rated Current 10 A
- Measurement Category CAT III/1000 V



Order information

Cat. No.	Colour	Dim/mm (approx.)
160111	red	51 x 98 mm
160121	black	51 x 98 mm

1602

4-mm-Safety Plug System

- Dim approx. 32 x 78 mm
- Rated Current 6 A
- Measurement Category CAT III / 1000 V



Order information

Cat. No.	Colour	Dim/mm (approx.)
160211	red	32 x 78
160221	black	32 x 78

Safety Set 1400

4-mm-Safety Plug System

- 2 pc. Test Leads red/black
- 2 pc. Test Probes 4mm red/black
- 2 pc. Crocodil Clamp red/black



Order information

Cat. No.	Description
1400	Safety Set 1400

Safety Test Leads for Multimeter 1401

4-mm Safety Plug System with PVC insulation

- Test Probe with 2-mm tip probe
- Rated Current 10 A
- Measurement Category CAT III / 1000 V



Order information

Cat. No.	Description
1401	Safety Test Leads for Multimeter 1401

Safety Test Leads for Multimeter 1402

4-mm Safety Plug System with Silicon insulation

- Test Probe with 2-mm tip probe
- Rated Current 10 A
- Measurement Category CAT III / 1000 V



Order information

Cat. No.	Description
1402	Safety Test Leads for Multimeter 1402

Flexible Wire Probe for Multimeter 1008

4-mm-Safety Plug System

- Temperature Range -50...+400°C
- Response Time approx. 5s (63.2% of final temperature value)
- Accuracy +/- 1.5°C
- Weight approx. 22 g



Order information

Cat. No.	Description
1008	Flexible Wire Probe for Multimeter 1008

Mains or battery operation



Bug Scare Advanced

HDT Bug Scare Advanced

- Five different alternating sound frequencies
- Automatic changing between frequencies and pauses
- Night mechanism activated by a photo-sensor, which intensifies the unit's effectiveness at night
- LED shows that the unit is activated
- Effective range of up to 80 m³

Technical Data

Display:	3 LEDs
Power Supply:	230 V / 50 Hz or battery 9V, IEC 6LR61
Sonic Frequencies:	approx. 7 kHz repels fleas, mosquitoes, cockroaches, roaches approx. 10 kHz repels mice, rats, flies approx. 12 kHz repels ferrets/weasels
Protection Class:	II
Protection Degree:	IP 40
Effective Range:	approx. 80 m ³
Dimensions:	55 x 70 x 86 mm
Weight:	approx. 75 g

Scope of Supply

1 pc HDT BugScare 9005
1 pc Instruction Manual

Order Information

Description	Cat. No.
Bug Scare Advanced	9005



OPTIONS

Packaging	Gift Box	Sliding Blister
	4-color	4-color
	Neutral white	Neutral white
Instruction Manual	with specific customer data	

BugScare-Series

BugScare

- LED guiding lights (9002/9003)
- Low power consumption
- Optical function control
- Light-sensitive sensor
- Effective range up to 20 m³
- Mains connection, no battery necessary

Technical Data

Display: 4 LEDs
2 guiding-LEDs

Power Supply: 230 V / 50 Hz

Sonic Frequencies: approx. 7 kHz repels fleas, mosquitoes, cockroaches, roaches
approx. 10 kHz repels mice, rats, flies
approx. 12 kHz repels ferrets/weasels

Protection Class: II

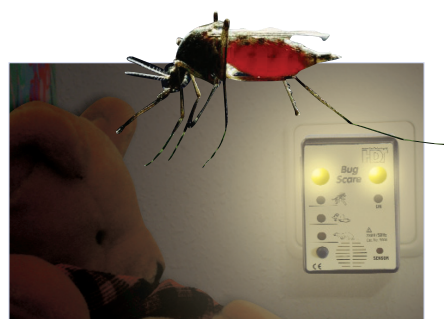
Protection Degree: IP 40

Effective Range: approx. 80 m³

Dimensions: 55 x 70 x 86 mm

Weight: approx. 75 g

repels pests



Scope of Supply

1 pc HDT BugScare 9001
or
1 pc HDT BugScare 9002
or
1 pc HDT BugScare 9003
1 pc Instruction Manual

Order Information

Description	Cat. No.
HDT Bug Scare	9001
HDT Bug Scare with white navigation light	9002
HDT BugScare with yellow navigation light	9003

OPTIONS

Packaging	Gift Box	Sliding Blister
	4-color	4-color
	Neutral white	Neutral white
Instruction Manual	with specific customer data	



