

Laboratory Power Supplies

ADVANCED MULTI-OUTPUT POWER SUPPLIES

8

MX Series

- ▶ Triple or quad output.
- ▶ Digital control.
- ▶ Multi on/off with sequence delay.
- ▶ Tracking.
- ▶ TriLink.
- ▶ Powershare.



NEW MODEL

HIGHER VOLTAGE
120v

HIGHER CURRENT
20A

HIGHER POWER
420w

OUTPUT **<3mV** NOISE

TEST BRIDGE

COMPACT POWERFLEX POWER SUPPLIES

2

FX Series

- ▶ Dual or triple output.
- ▶ Digital control.
- ▶ Tracking.
- ▶ Multi on/off.



NEW SERIES

HIGHER VOLTAGE
42v

HIGHER CURRENT
6A

HIGHER POWER
246w

OUTPUT **<2mV** NOISE

TEST BRIDGE

TOUCH CONTROL

SELV

HIGH CURRENT POWERFLEX POWER SUPPLIES

5

QPX Series

- ▶ Single or dual output.
- ▶ Analogue remote control.
- ▶ Smart tracking modes.
- ▶ Logic in/out control.



NEW MODEL

HIGHER VOLTAGE
80v

HIGHER CURRENT
50A

HIGHER POWER
1200w

OUTPUT **<1mV** NOISE

TEST BRIDGE

TOUCH CONTROL

POWERFLEX POWER SUPPLIES

7

CPX Series

- ▶ Single or dual output.
- ▶ Analogue control.
- ▶ Tracking and on/off sync.



HIGHER VOLTAGE
60v

HIGHER CURRENT
20A

HIGHER POWER
840w

OUTPUT **<1mV** NOISE

TEST BRIDGE

ADVANCED LINEAR POWER SUPPLIES

18

PL Series

- ▶ Single, dual or triple output.
- ▶ Low I range, 0.1 mA.
- ▶ Tracking and parallel modes.
- ▶ V-Span.



HIGHER VOLTAGE
60v

HIGHER CURRENT
8A

HIGHER POWER
228w

OUTPUT **<0.4mV** NOISE

TEST BRIDGE

HIGH VOLTAGE POWER SUPPLIES

6

PLH Series

- ▶ Single output.
- ▶ Low I range, 0.1 mA.
- ▶ Analogue remote control.
- ▶ V-Span.



HIGHER VOLTAGE
250v

MAXIMUM CURRENT
0.75A

HIGHER POWER
94w

OUTPUT **<2mV** NOISE

TEST BRIDGE

PRECISION LINEAR POWER SUPPLIES

12

QL Series

- ▶ Single or triple output.
- ▶ Digital control.
- ▶ Link mode.



HIGHER VOLTAGE
56v

MAXIMUM CURRENT
5A

HIGHER POWER
242w

OUTPUT **<0.35mV** NOISE

TEST BRIDGE

VERSATILE POWER SUPPLIES

4

TSX Series

- ▶ Single output.
- ▶ Analogue or digital control.
- ▶ Power meter.
- ▶ Silent fan-free cooling.



HIGHER VOLTAGE
35v

HIGHER CURRENT
20A

HIGHER POWER
360w

OUTPUT **<1mV** NOISE

TEST BRIDGE

LINEAR POWER SUPPLIES

10

EL Series

- ▶ Single, dual or triple output.
- ▶ Analogue control.
- ▶ Silent fan-free cooling.



HIGHER VOLTAGE
56v

MAXIMUM CURRENT
5A

HIGHER POWER
130w

OUTPUT **<1mV** NOISE

EFFICIENT POWER SUPPLIES

9

EX Series

- ▶ Single, dual or triple output.
- ▶ Analogue control.
- ▶ Silent fan-free cooling.



HIGHER VOLTAGE
150v

HIGHER CURRENT
20A

HIGHER POWER
420w

OUTPUT **<2mV** NOISE

Waveform Generators

HIGH PERFORMANCE FUNCTION / ARB / PURE PULSE WAVEFORM GENERATOR

TGD4254

- ▶ Quad output.
- ▶ 125 MHz Pulse.
- ▶ Pulse train - 10 unique pulses with all variable pulse parameters.
- ▶ Precise multi channel control.
- ▶ Dedicated sync per channel.
- ▶ Pause and play waveforms.



COMING SOON	1 μ Hz TO 250MHz
TOUCH CONTROL	16 BITS
0.1ns RESOLUTION	1GS/s
64M POINTS	VARIABLE EDGE 2ns TO 1Ks

TEST BRIDGE WFM

DDS FUNCTION GENERATOR

ATG1005

- ▶ Single output.
- ▶ Dedicated sync output.
- ▶ Linear/logarithmic sweep with single or dual slope.
- ▶ FSK and PSK modes.

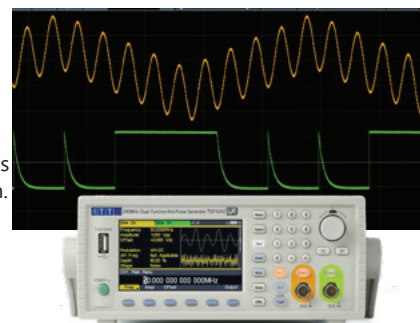
NEW MODEL
1mHz TO 5MHz
TOUCH CONTROL
TEST BRIDGE WFM



HIGH FREQUENCY FUNCTION / PULSE / ARB GENERATOR

TGF4000 Series

- ▶ Dual output.
- ▶ 100 MHz pulse.
- ▶ Modulation, sweep and burst modes.
- ▶ SUM, PRBS, harmonics and noise modulation.



1 μ Hz TO 240MHz
TEST BRIDGE WFM
0.1ns RESOLUTION
8K POINTS
16 BITS
800MS/s
VARIABLE EDGE 3ns TO 800s

DIGITAL PURE PULSE GENERATOR

TGP3100 Series

- ▶ Single or dual output.
- ▶ 60 ps RMS trigger to output uncertainty.
- ▶ Modulation, sweep and burst modes.
- ▶ Pulse, double pulse, user pattern, PRBS, PWM, PDM, SPDM modulations.



1mHz TO 50MHz
16 BITS
800MS/s
0.1ns RESOLUTION
VARIABLE EDGE 5ns TO 800s

TEST BRIDGE WFM

DDS FUNCTION/ ARB GENERATOR

TG501x/251x Series

- ▶ Single or dual output.
- ▶ Modulation, sweep and burst modes.



1 μ Hz TO 50MHz
TEST BRIDGE WFM
14 BITS
125MS/s
256K POINTS
VARIABLE EDGE 8ns TO 40 μ s

Waveform Amplifier

ANALOGUE PULSE GENERATOR

TGP110

- ▶ Pulse, Square, double pulse, delayed pulse.
- ▶ Variable pulse width and delay.
- ▶ Fixed trigger to output delay.
- ▶ Dedicated Sync out and Aux out.



10MHz

WIDEBAND AMPLIFIER

WA301

- ▶ 50 Ω and 600 Ω outputs.
- ▶ DC to 1 MHz bandwidth.
- ▶ 0 to +20 dB gain.



1MHz
30v P-P

INFORMATION KEY

HIGHER	↑	1	Number of models in the series.
		TOUCH CONTROL	Touch Screen.
		TEST BRIDGE	Remote software available.
		SELV	Separated extra-low voltage.

The maximum specifications per series are shown. Colour variation from bottom to top represent the lowest to highest available.

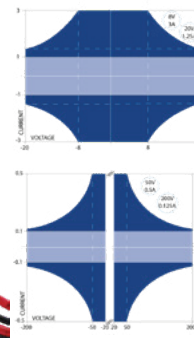
Source Measure Units

HIGH PERFORMANCE SMU

2

SMU4000 Series

- ▶ 4-quadrant source, sink and measure.
- ▶ 0.1 μ V & 100 fA resolution.
- ▶ Continuous or pulsed high speed outputs with linear or logarithmic sweeps and arb lists.
- ▶ Advanced load modes.
- ▶ Tolerance band sorting.
- ▶ 210 V and 21 V models available.
- ▶ Link two SMUs together to perform simultaneously with SMU link.



SELV

TOUCH CONTROL

TEST BRIDGE SMU

HIGHER VOLTAGE
210V

6 1/2 DIGIT

MAXIMUM CURRENT
3.15A

2 OR 4 WIRE

25W POWER

200 μ s MEASUREMENTS

POWER LOSS REGULATION

0.015% ACCURACY

DC Electronic Loads

COMPACT DIGITAL ELECTRONIC LOAD

ALD1120

- ▶ Variable slew rate.
- ▶ High and low pulse.
- ▶ Linear/logarithmic sweeps.
- ▶ Battery discharge and capacity measurements.



COMING SOON

HIGHER VOLTAGE
120V

HIGHER CURRENT
24A

120W POWER

CC CR CV CP

TOUCH CONTROL

TEST BRIDGE

HIGH CURRENT DC LOAD

2

LD400 Series

- ▶ Built in transient generator.
- ▶ Variable dropout.
- ▶ Battery test feature.



80V VOLTAGE

HIGHER CURRENT
80A

400W POWER

CC CR CV CP

TEST BRIDGE

CAT II HIGH VOLTAGE DC LOAD

LDH400P

- ▶ Built in transient generator.
- ▶ Variable dropout.
- ▶ Live PFC test 300V, CAT II.
- ▶ Current monitor output.



HIGHER VOLTAGE
500V

16A CURRENT

400W POWER

CAT II 300V

CC CR CV CP

TEST BRIDGE

Digital Multimeters

DIGITAL MULTIMETER

ADM1055

- ▶ Ax+B, limits, % deviation and power.
- ▶ 0.02% basic accuracy
- ▶ Analogue style bar chart, histogram and statistics.



NEW MODEL

600V DC

10A CURRENT

5 1/2 DIGIT

2 WIRE

TOUCH CONTROL

TEST BRIDGE

ADVANCED DIGITAL MULTIMETER

2

1908 Series

- ▶ Dual display and measurement.
- ▶ Battery or AC line power.
- ▶ 0.02% basic accuracy.
- ▶ Frequency, capacitance and temperature.
- ▶ Auto and manual ranging.
- ▶ USB standard.

Function	Ranges	Best Resolution
DC V	(5) 100 mV - 1000 V	1 μ V
AC V	(5) 100 mV - 750 V	1 μ V
Resistance	(6) 100 Ω - 10M Ω	1m Ω
DC I	(3) 10 mA - 10 A	0.1 μ A
AC I	(3) 10 mA - 10 A	0.1 μ A



1kV DC

10A CURRENT

5 1/2 DIGIT

2 OR 4 WIRE

TEST BRIDGE

Frequency Counters

HIGH ACCURACY FREQUENCY COUNTER

2

TF900 Series

- ▶ Battery or AC line power.
- ▶ Frequency, period, pulse width and totalise modes.
- ▶ 3 or 6GHz RF input.



6GHz

DC TO 125MHz

10 DIGIT

1ppm TCXO

TEST BRIDGE

HANDHELD FREQUENCY COUNTER

PFM3000

- ▶ Battery operation.
- ▶ Handheld.
- ▶ Frequency or period display.
- ▶ Long battery life.



3GHz

3Hz MINIMUM

8 1/2 DIGIT

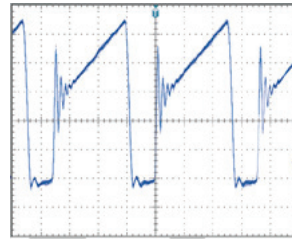
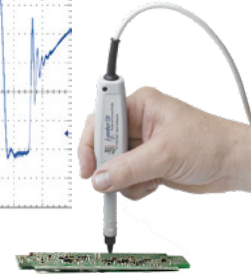
Current Probe

INNOVATIVE CURRENT AND MAGNETIC FIELD MEASUREMENT

I-prober 520

- ▶ Non-intrusive current measurement by insulated probe.
- ▶ Observe current flow in PCB tracks, component leads or ground planes.
- ▶ Calibrated magnetic field measurement.
- ▶ Clip-on concentrator for measuring current in cables.
- ▶ Low noise figure equivalent to <6mA rms at full B/W.
- ▶ Connect to any oscilloscope.

I-prober 520
Positional Current Probe
PCB Track - Touch & Measure



DC
TO
5MHz

10mA
TO
20App

TOUCH
&
MEASURE

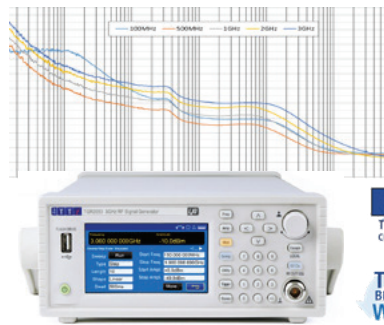
CAT II
300V

RF Signal Generators

HIGH ACCURACY AND STABILITY SIGNAL GENERATOR

TGR205x Series

- ▶ Flatness ± 0.15 dB typ.
- ▶ Accuracy ± 0.3 dB typ.
- ▶ Harmonics <40 dBc @ 13 dBm output.
- ▶ Residual spurs up to 70 dBc typ.
- ▶ External and Internal digital and analogue input.
- ▶ Digital and analogue modulations.



150kHz
TO
3GHz

+13dBm
TO
-127dBm

<5ms
SETTLING
TIME

VSWR
1.5:1
TYP.



HIGH FREQUENCY RF SIGNAL GENERATOR

TGR6000

- ▶ High speed sweep.
- ▶ Low phase noise.



10MHz
TO
6GHz

+7dBm
TO
-110dBm

<8ms
SETTLING
TIME

Spectrum Analyzers

TRUE HANDHELD REAL-TIME SPECTRUM ANALYZER

PSA Series 4

- ▶ 37.5 us min. duration for 100% POI.
- ▶ 80000 FFTs per second.
- ▶ Triggering on frequency masks
- ▶ Waterfall and Heatmap displays.
- ▶ Choice of FFT length, detectors and window functions.



NEW
MODEL

1MHz
TO
2.7GHz

10.8MHz
REAL TIME
BW

-131dBm
DANL

VSWR
1.4:1
TYP.

TEST
BRIDGE
PSA

+23dBm
MAX.



TRUE HANDHELD SPECTRUM ANALYZER

PSA Series 5

- ▶ Advanced digital processing.
- ▶ Harmonics <60 dBc, spurs <60 dBc.
- ▶ Residual spurs <70 dB below ref level.
- ▶ IP3 <60 dBc.
- ▶ Scan mode.



10MHz
TO
6GHz

-120dBm
DANL

VSWR
1.5:1
TYP.

TEST
BRIDGE
PSA

+25dBm
MAX.



INFORMATION KEY

- HIGHER
↑
- SINK
SOURCE
FREQUENCY
- 1 Number of models in the series.
- TOUCH CONTROL Touch Screen
- TEST BRIDGE Remote software available
- SELV Separated extra-low voltage.

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