



# AM 503S Current Measurement Systems

**Simultaneous AC/DC Measurements**

**DC to 100 MHz Bandwidths**

**Continuous Current Amplitudes from mA to 500 A (Peak to 700 A)**

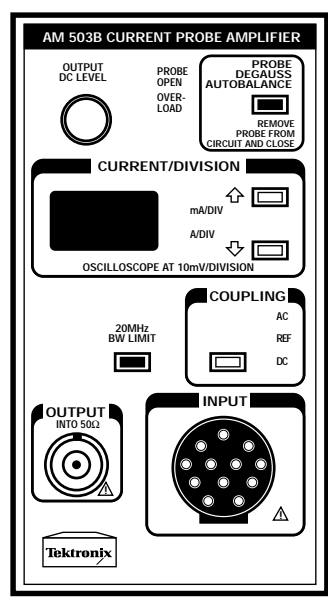
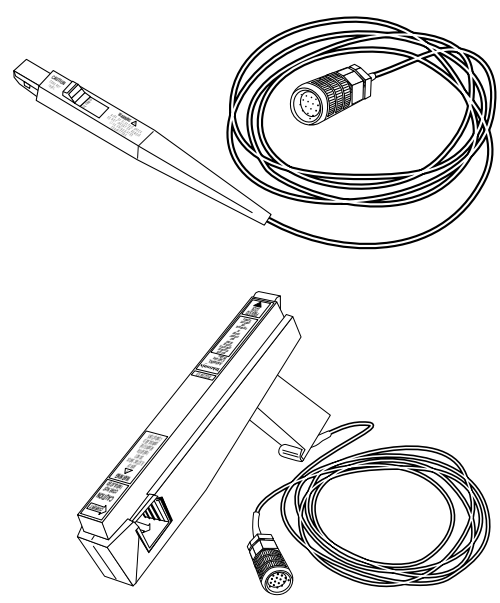
**High Sensitivity**

**One Button Autobalance and Probe Degauss**

**Supports 6 Different Probes**

**No Need to Calibrate Amplifier with Specific Probes**

**GPIB Programmable (AM 5030)**



**T**he AM 503S Current Measurement System provides a complete system in a single package. It consists of an AM 503B Current Probe Amplifier, a current probe (A6302 is standard, A6312 is Option 5), a TM 502A Power Module, and a plug-in toolbox. You can boost flexibility by using any of the four other A6300 Current Probes.

The AM 5030 Current Probe Amplifier is a GPIB programmable version of the AM 503B; use it with a TM 5000 Power Module and any of the six A6300 probes to extend your capabilities.

## STANDARD SPECIFICATIONS

AM 503B or AM 5030 w/	A6312	A6302	A6302XL	A6303	A6303XL	A6304XL
<b>Bandwidth: DC to</b>	100 MHz	50 MHz	17 MHz	15 MHz	10 MHz	2 MHz
<b>Rise Time</b>	≤ 3.5 ns	≤ 7 ns	≤ 20 ns	≤ 23 ns	≤ 35 ns	≤ 175 ns
<b>Max Continuous Current</b>	20 A	20 A	20 A	100 A	100 A	500 A
<b>Max Peak Current</b>	50 A	50 A	50 A	500 A	500 A	700 A
<b>Max Conductor Diameter</b>	3.81 mm (0.15")	3.81 mm (0.15")	3.81 mm (0.15")	21 mm (0.83")	21 mm (0.83")	21 mm (0.83")
<b>Cable Length</b>	2 m	2 m	8 m	2 m	8 m	8 m
<b>Warranty</b>	1 year	1 year	1 year	1 year	1 year	1 year

**Note:**

The AM 503B works with a TM 500 or TM 5000 Power Module, the AM 5030 plugs into only the TM 5000 Power Module. XL Probes work only with the AM 503B and AM 5030—not with the older AM 503 and AM 503A Current Probe Amplifiers.



## AM 503S Current Measurement Systems

To find the authorized Tektronix distributor nearest you, call:

### ASEAN Countries

(65) 356-3900

### Australia & New Zealand

61 (2) 888-7066

### Austria

43 (1) 7 0177-261

### Belgium

32 (2) 725-96-10

### Brazil and South America

55 (11) 3741 8360

### Canada

1 (800) 661-5625

### Denmark

45 (44) 850700

### Finland

358 (0) 4783 400

### France & North Africa

33 (1) 69 86 81 81

### Germany, Eastern Europe, & Middle East

49 (221) 94 77-0

### Hong Kong

(852) 2585-6688

### India

91 (80) 2265470

### Italy

39 (2) 250861

### From other areas, contact:

Tektronix, Inc. Export Sales  
P.O. Box 500, M/S 50-255  
Beaverton, Oregon 97077-0001 USA  
(503) 627-1916

Visit our Web site:

World Wide Web: <http://www.tek.com>



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## AM 503S SYSTEM INCLUDES

AM 503B Current  
Probe Amplifier

TM 502A Power Module

A6302 Current Probe

Plug-in Toolbox  
016-0362-02

Instruction Manual  
070-8766-05

## INCLUDED ACCESSORIES CURRENT PROBE AMPLIFIERS

50  $\Omega$  BNC Cable  
012-0057-01  
(AM 5030/AM 503B)

50  $\Omega$  BNC Termination  
011-0049-01  
(AM 5030/AM 503B)

Instruction Manual  
070-8766-05  
(AM 5030/AM 503B)

Reference Card  
070-8770-01  
(AM 5030/AM 503B)

## INSTRUMENT OPTIONS AM 503S

Opt. 01 Add A6303 100 Amp  
Continuous Current Probe

Opt. 03 Substitute A6303 for  
A6302

Opt. 05 Substitute A6312 for  
A6302

Opt. 09 Delete A6302

## INCLUDED ACCESSORIES PROBES

130 mm (5 inch) Ground Lead  
175-0124-01  
(A6302/A6302XL)

75 mm (3 inch) Ground Lead  
175-0263-01  
(A6302/A6302XL)

## POWER MEASUREMENT SOLUTION PACKAGES

Tektronix offers a broad selection of instrumentation for power electronics applications. The AM 503 family of Current Measurement Systems combined with Tektronix isolators, high voltage probes, and high performance TDS oscilloscopes provide a balanced set of features for making power measurements.

### For Power Supply Design

Order	Features
TDS 420A	150 MHz, 4-channel oscilloscope with DSP math
A6302	20 A current probe, DC to 50 MHz
P5100	2.5 kV voltage probe, DC to 300 MHz
A6905S	Fiber optic isolator, 10 kV/ $\mu$ s, 15 MHz, $\pm$ 850 V
P5205	High Voltage Differential Probe, DC to 100 MHz

### For Switch Mode Control

Order	Features
TDS 460A	350 MHz, 4-channel oscilloscope with DSP math
A6303	100 A current probe, DC to 15 MHz
P5100	2.5 kV voltage probe, DC to 300 MHz
A6906S	Fiber optic isolator, 100 kV/ $\mu$ s, 100 MHz, $\pm$ 850 V
P5205	High Voltage Differential Probe, DC to 100 MHz

### For High-Power Switch Mode Control

Order	Features
TDS 420A	150 MHz, 4-channel oscilloscope with DSP math
A6304XL	500 A current probe, DC to 2 MHz
P6015A	40 kV voltage probe, DC to 75 MHz
A6906S	Fiber optic isolator, 100 kV/ $\mu$ s, 100 MHz, $\pm$ 850 V
P5205	High Voltage Differential Probe, DC to 100 MHz

### Available Reference Information

"Floating Oscilloscope Measurements"	51W-10640-0
"Simplifying Power Measurements"	51W-10798-1
"TDS 400 Series Digitizing Oscilloscopes"	3GW-8207-5

### 2 Miniature Alligator Clips

344-0046-00  
(A6302/A6302XL)

### Carrying Case

016-0622-02  
(A6303/A6303XL/A6304XL)

### Instructions

070-3905-03  
(A6302/A6302XL)

### Instructions

070-3906-02  
(A6303/A6303XL)

### Instructions

070-8939-00  
(A6304/A6304XL)

### Instructions

070-9603-00  
(A6312)