



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)

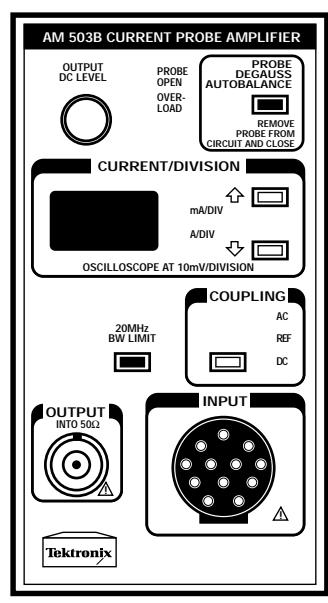
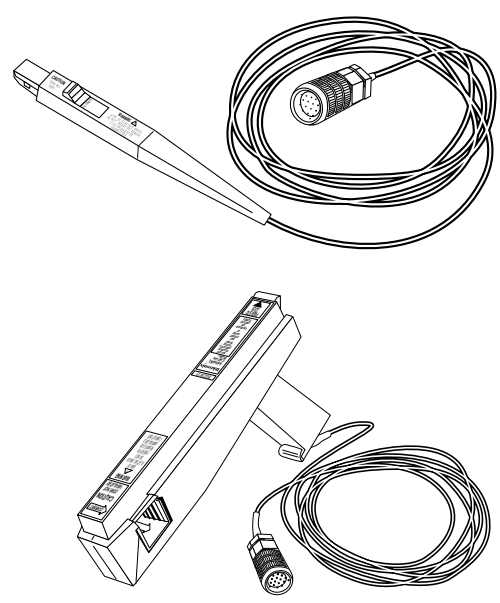
High Sensitivity

One Button Autobalance and Probe Degauss

Supports 6 Different Probes

No Need to Calibrate Amplifier with Specific Probes

GPIB Programmable (AM 5030)



The 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
Bandwidth: DC to	100 MHz	50 MHz	17 MHz	15 MHz	10 MHz	2 MHz
Rise Time	≤ 3.5 ns	≤ 7 ns	≤ 20 ns	≤ 23 ns	≤ 35 ns	≤ 175 ns
Max Continuous Current	20 A	20 A	20 A	100 A	100 A	500 A
Max Peak Current	50 A	50 A	50 A	500 A	500 A	700 A
Max Conductor Diameter	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")
Cable Length	2 m	2 m	8 m	2 m	8 m	8 m
Warranty	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

Japan
(Sony/Tektronix
Corporation)
81 (3) 3448-4611

**Mexico,
Central America,
& The Caribbean**
52 (5) 666-6333

The Netherlands
31 23 56 95555

Norway
47 (22) 070700

**People's Republic
of China**
(86) 10-62351230

Republic of Korea
82 (2) 528-5299

Spain & Portugal
34 (1) 372 6000

Sweden
46 (8) 629 6500

Switzerland
41 (42) 219192

Taiwan
886 (2) 765-6362

**United Kingdom
& Eire**
44 (1628) 403300

USA
1-800-479-4490

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>



Copyright © 1996, Tektronix, Inc.
All rights reserved. Printed in U.S.A. Tektronix products are covered by U.S. and foreign patents, issued and pending. Information in this publication supersedes that in all previously published material. Specification and price change privileges reserved. TEKTRONIX and TEK are registered trademarks.

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 Ω BNC Cable
012-0057-01
(AM 5030/AM 503B)

50 Ω 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/ μ 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/ μ 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/ μ 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)