

Multiplelabs
Turnkey Laboratories Solutions



Analytical[®]
Technologies Limited

MSO-3500

Series Digital Oscilloscope



EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net

- Analog bandwidth: 350 MHz, 200 MHz, 100 MHz, and 70 MHz; bandwidth upgrade option supported
- 2 or 4 analog channels (upgradable), standard 16 digital channels(LA probe required)
- Up to 8 GSa/s real-time sample rate
- Up to 200 Mpts memory depth (option)
- High waveform capture rate (over 500,000 wfm/s)
- Auto measurement of 41 waveform parameters; full-memory hardware measurement function
- A variety of serial protocol triggers and decodes
- Up to 450,000 frames of hardware real-time and ceaseless waveforms recording and playback functions
- Independent search, navigation keys, and event table
- Built-in advanced power analysis software (option)
- Integrates 7 independent instruments into 1, including a digital oscilloscope, a logic analyzer, a spectrum analyzer, an arbitrary waveform generator, a digital voltmeter, a frequency counter and totalizer, and a protocol analyzer
- 9-inch capacitive multi-touch screen, 256-level intensity grading display, with color persistence
- Multiple interfaces available: USB HOST&DEVICE, LAN(LXI), HDMI, TRIG OUT and USB-GPIB
- Web Control remote command
- Unique online version upgrade
- Novel and delicate industrial design, easy to operate

MSO3500 series digital oscilloscope is a high-performance oscilloscope model designed based on ATL UltraVision technology. With a 9-inch capacitive multi-touch screen, the MSO3500 series integrates 7 independent instruments into one, delivering super sample bandwidth ratio, extremely high memory depth, and other excellent specifications. It is compact and portable in design, and all of the MSO series products support multiple channels, bandwidths, and the upgrade of the analysis software. As it integrates many functions of multiple instruments, different user groups can have more choices in selecting their desired product based on their needs, helping them save their budget to a large extent while enjoying the superior test support and user experience.

►► **UltraVision Technology Platform Brings Excellent Specifications**

The UltraVision platform integrates ATL's latest research achievements in the digital oscilloscope's signal processing, data analysis, and waveform visualization, with higher waveform capture rate, full digital trigger technology, and full memory hardware measurement technology. The MSO3500 series digital oscilloscope is equipped with the UltraVision, and also integrates 7 general instruments in the electronics measurement industry, offering extraordinary user experience at an unprecedented price point.

- High sample rate (maximum sample rate: 8 GSa/s)
- High memory depth (maximum memory depth of 200 Mpts, optional)
- High waveform capture rate (over 500,000 waveforms per second)
- Real-time waveform recording and playback functions (up to 450,000 frames)
- Full memory hardware measurement technology
- Full digital trigger technology

►► **Higher Reliability and Longer Service Life**

The main board circuit of the MSO3500 series digital oscilloscope adopts ATL's latest developed dedicated ASIC chipset, Which makes the front-end circuit enjoy a higher integration, the circuit design more simple and reliable. Meanwhile, no relay is added to the MSO3500 series, which has prolonged the service life of the oscilloscope to a large extent, indirectly reducing the usage cost for users and further highlighting its cost-effective advantage.

►► **Available for Software Upgrade with Options According to User's Demands**

Want more function within your limited budget? The MSO3500 series suffices! It has been fully configured with 4 analog channels, hardware analog bandwidth, 16-channel logic analyzer and dual-channel AWG hardware circuit before leaving the factory. If you have more demands in the future, purchase the desired option for expansion through relevant channels. Only a license is enough. So easy!

- **Standard 4 analog channels in hardware**

The MSO5XX2model can be upgraded to 4-CH at any time.

The model remains unchanged.

- **Supports the highest analog bandwidth in hardware**

Any MSO3500 low bandwidth model can be upgraded to higher bandwidth at any time.

The model remains unchanged. For example, the MSO5072 can be upgraded to 350 MHz bandwidth.

- **Standard logic analyzer interface in hardware**

Any MSO3500 standard with 16-CH logic analyzer interface and function software, and only a PLA2216 probe is required to be ordered.

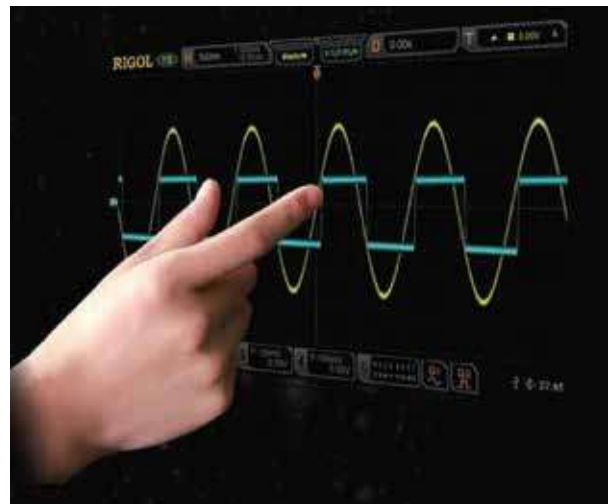
- **Standard AWD output port in hardware**

Any MSO3500 standard with 2-CH arbitrary waveform generator output port, and only AWG software is required to be ordered.

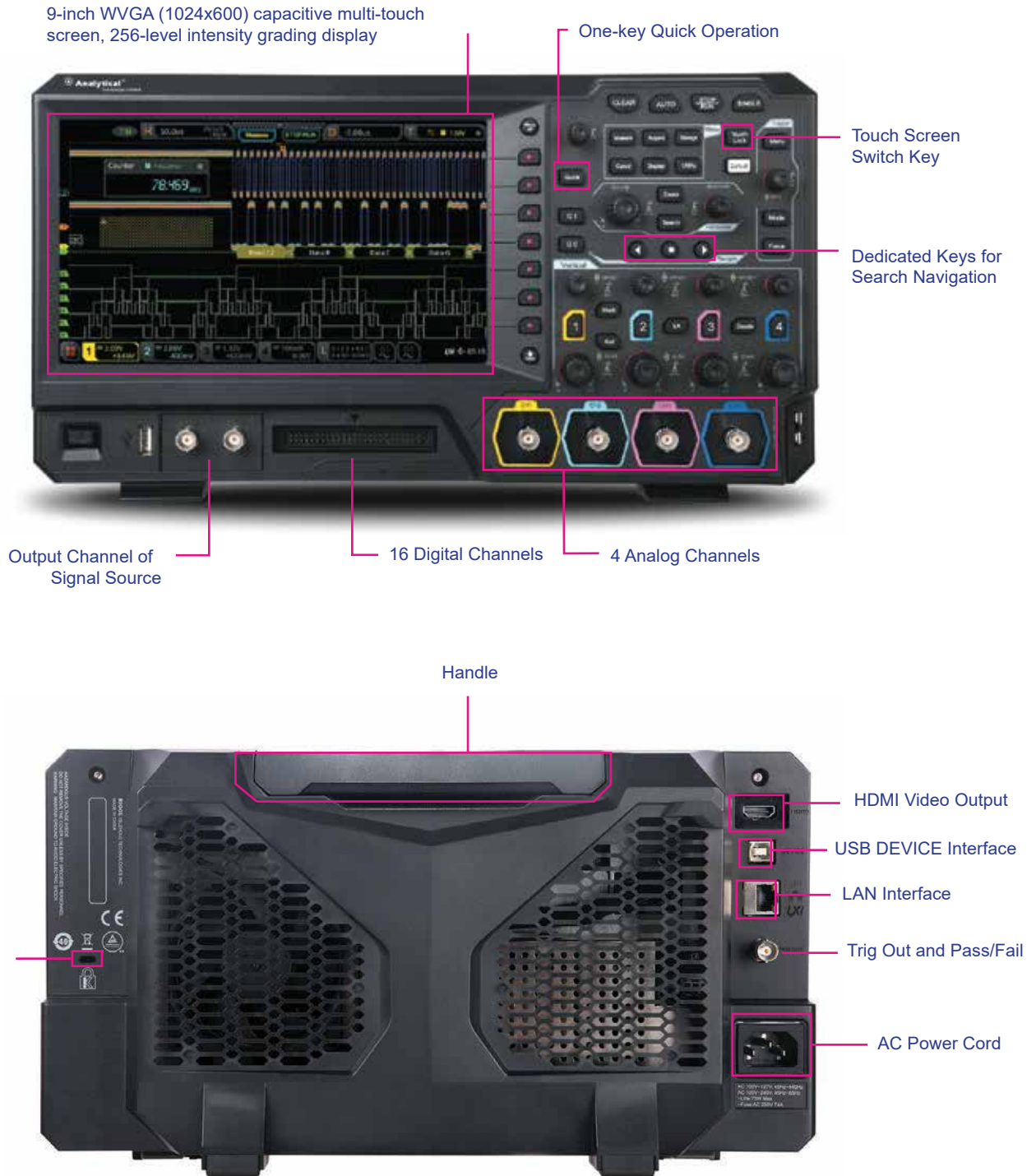
►► **Mainstream Touch Screen Design Offers You Supreme User-Friendly Experience**

The 9-inch capacitive multi-touch screen supports various touch gestures, making it always keep up with the mainstream development trend for screen operation. Various multi-touch gestures such as Tap, Drag, Pinch & Stretch, and Rectangle Drawing are supported, making the measurement actions more smooth, convenient, and easy for users to operate.

Meanwhile, the MSO3500 series digital oscilloscope still keeps the knob and key operation as what ATL traditional digital oscilloscopes have, optimizing the user-friendly interactive experience 1 to a large extent.



►► Small Body, Big Use



►► Overview of ATL's Medium-end Series Products

| | MSO/DS3200A | MSO/DS3400 | MSO3500 | DS3600 | MSO/DS3700 |
|---------------------------------------|------------------------------------------------|------------------------------------------------------|----------------------------------------------------------------|------------------------------------------------|----------------------------------------------------------------|
| Analog Channel+Digital Channel | 2+16 | 4+16 | 2/4+16 | 4 | 4+16 |
| Analog Bandwidth | 70 MHz to 300 MHz | 100 MHz to 500 MHz | 70 MHz to 350 MHz | 600 MHz to 1 GHz | 100 MHz to 500 MHz |
| Max. Sample Rate | 2 GSa/s | 4 GSa/s | 8 GSa/s | 5 GSa/s | 10 GSa/s |
| Max. Memory Depth | 56 Mpts (optional) | 140 Mpts | 200 Mpts (optional) | 140 Mpts | 500 Mpts (optional) |
| Waveform Capture Rate | > 52,000 wfms/s | > 110,000 wfms/s | >500,000 wfms/s | > 180,000 wfms/s | > 600,000 wfms/s |
| Max. Frames of Waveform Recording | 65,000 | 200,000 | 450,000 | 200,000 | 450,000 |
| LCD | 8" | 9" | 9" capacitive multi-touch screen | 10.1" | 10.1" capacitive multi-touch screen |
| Hardware Mask Test | Standard | Standard | Standard | Standard | Standard |
| Built-in Arbitrary Waveform Generator | 2 CH, 25 MHz (optional) | None | 2 CH, 25 MHz (optional) | None | 2 CH, 25 MHz (optional) |
| Built-in Digital Voltmeter | None | None | Standard | None | Standard |
| Built-in Hardware Counter | 6-digit frequency counter | 6-digit frequency counter | 6-digit frequency counter + totalizer | 6-digit frequency counter | 6-digit frequency counter + totalizer |
| Search and Navigation | None | None | Standard, supporting table display | None | Standard, supporting table display |
| Power Analysis | PC (optional) | PC (optional) | Built-in UPA (optional) | PC (optional) | Built-in UPA (optional) |
| Serial Protocol Analysis | RS232/UART, I2C, SPI, CAN, and USB | RS232/UART, I2C, SPI, CAN, FlexRay, and MIL-STD-1553 | RS232/UART, I2C, SPI, CAN, LIN, FlexRay, I2S, and MIL-STD-1553 | RS232/UART, I2C, SPI, CAN, and FlexRay | RS232/UART, I2C, SPI, CAN, LIN, FlexRay, I2S, and MIL-STD-1553 |
| Waveform Color Persistence | None | None | Standard | None | Standard |
| Histogram | None | None | Standard | None | Standard |
| FFT | Standard | Standard | Enhanced FFT, Standard | Standard | Enhanced FFT, Standard |
| MATH | Displays 1 function at the same time | Displays 1 function at the same time | Displays 4 function at the same time | Displays 1 function at the same time | Displays 4 function at the same time |
| Connectivity | standard: USB, LAN, and VGA option: USBGPIB | standard: USB, LAN, and VGA option: USBGPIB | standard: USB, LAN, and HDMI option: USBGPIB | standard: USB, VGA, and LAN option: USBGPIB | standard: USB, LAN, and HDMI option: USBGPIB |

HPLC Servicing, Validation, Trainings and Preventive Maintenance :

HPLC Servicing :HPLC Servicing : We have team of service engineers who can attend to any make of HPLC promptly @the most affordable cost.

Trainings :We also take up preventive Maintenance to reduce downtime of HPLC's Trainings.

AMC's/CMC :AMC's/CMC :We offer user training both in-House and at customer sites on HPLC principles, operations, trouble-shooting.

Validations :Validations :We have protocols for carrying out periodic Validations as per GLP/GMP/USFDA norms.

Instruments :Instruments :We offer instruments/Renting Services Modules like pumps,detector etc. on Rent.



About Analytical Technologies

Analytical Technologies is synonymous for offering technologies for doing analysis and is the Fastest Growing Global Brand having presence in at least 96 countries across the global. Analytical Technologies Limited is an ISO:9001 Certified Company engaged in Designing, Manufacturing, Marketing & providing Services for the Analytical, Chromatography, Spectroscopy, Bio Technology, Bio Medical, Clinical Diagnostics, Material Science & General Laboratory Instrumentation. Analytical Technologies, India has across the Country operations with at least 4 Regional Offices, 6 Branch Offices & Service Centers. Distributors & Channel partners worldwide.

Our Products & Technologies



UV/VIS
Spectro 2080+
Double Beam



Infra FTIR



Optima Gas
Chromatograph
3007



Optima Gas
Chromatograph
2979 Plus



Flash
Chromatograph



Atomic Absorption
Spectrophotometer



Liquid Particle
Counter



Optical Emission
Spectrophotometer



DSC/TGA



Semi Auto Bio
Chemistry Analyzer



HEMA 2062
Hematology
Analyzer



Micro Plate
Reader/Washer



URINOVA 2800
Urine Analyzer



Total Organic
Carbon 3800



Fully Automated
CLIA



NOVA-2100
Chemistry Analyzer



PCR/Gradient PCR/
RTPCR



TOC
Analyzer



Laser Particle
Size Analyzer



Ion Chromatograph



Water purification
system

Regulatory compliances



Corporate Social Responsibility

Analytical Foundation is a nonprofit organization (NGO) found for the purpose of:



Analytical
Foundation

1. Research & Innovation Scientist's awards/QC Professional Award : Quality life is possible by innovation only and the innovation is possible by research only, hence ANALYTICAL FOUNDATION is committed to identify such personalities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research / testing / publication at Info@analyticalfoundation.org

2. Improving quality of life by offering YOGA Training courses, Work shops/Seminars etc.

3. ANALYTICAL FOUNDATION aims to DETOXYFY human minds,souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.

Reach us @



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