

dataTec

Mess- und Prüftechnik. Die Experten.

Ihr Ansprechpartner /
Your Partner:

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5 SERIES B MSO MIXED SIGNAL OSCILLOSCOPE

Upgrades Available After Purchase

Upgrade as your needs change

Protocol and Analysis Options

- Serial bus decoding
 - 1-Wire
 - 8b10b
 - ARINC 429
 - Automotive Ethernet
 - CAN / LIN / FlexRay
 - CXPI
 - eSPI
 - EtherCAT
 - Ethernet
 - eUSB2
 - I²C
 - I2S Audio
 - I3C
 - Manchester
 - MDIO
 - MIL-STD-1553
 - MIPI C-PHY
 - MIPI D-PHY 1.2 (CSI/DSI)
 - NFC
 - NRZ
 - PSI5
 - RS-232 / UART
 - SDLC
 - SENT
 - SMBus
 - SpaceWire
 - SPI
 - SPMI
 - SVID
 - USB 2.0

Bandwidth Upgrades

- 500 MHz
- 1 GHz
- 2 GHz

Windows 10 Upgrade

Add solid state drive with
Windows 10 license

Digital Voltmeter / Trigger Frequency Counter

Free with product registration

Advanced Analysis

- Advanced Jitter
- Serial Bus Compliance/
Conformance
- Advanced Power Analysis
- Inverters, Motors and Drives
- Inverter Ride-through Analysis
- Double Pulse Testing
- Wideband Spectrum Analysis
- RF vs Time Analysis and
Triggering
- Signal Integrity Modeling
- Vector Signal Analysis
- User-defined Filter Creation
- Time Domain Reflectometry

Extend Record Length

Increase to:

- 125 Mpts / channel
- 250 Mpts / channel
- 500 Mpts / channel

Function Generator Upgrade

Arbitrary / Function Generator

Add TLP058 Logic Probes

Access 8 digital channels on any
FlexChannel input



Save with Application Bundles

Six Application Bundles deliver outstanding value.

Starter Bundle (5-STARTER-FL) – Capabilities that most engineers will find valuable

- Serial trigger, decode, search and event table analysis on I²C, SPI, RS-232/422/485/UART buses
- Integrated Arbitrary/Function Generator with 13 predefined waveform types as well as arbitrary waveforms

Six Pro Bundles – Designed for specific applications and industries

- Choose one of the six bundles below to fit your application.
- Each includes the Starter Bundle (above).
- Each extends record length to 125 M/ch.

Serial Protocol Decoding and Analysis (5-PRO-SERIAL-FL)	Power (5-PRO-POWER-FL)	Signal Integrity (5-PRO-SIGNAL-FL)	Standards Compliance (5-PRO-COMPL-FL)	Automotive (5-PRO-AUTO-FL)	Aerospace (5-PRO-AERODEF-FL)
• 1-Wire • 8b10b • Audio • CAN, CAN FD, CAN XL • CXPI • eSPI • EtherCAT • Ethernet • eUSB • FlexRay • I3C • LIN Manchester • MDIO • MIPI C-PHY • MIPI D-PHY • NRZ • Power Measurement and Analysis • SDLC • SMBus • SPMI • SVID • USB 2.0	• Advanced power analysis • Digital power management analysis • Double pulse testing for wide bandgap semiconductors • Inverter & motor drive analysis with DQ0 and mechanical measurements • Inverter ride-through measurements • SPMI decoding • SVID decoding • TDR measurements	• Advanced jitter analysis • LVDS debug* • Mask/limit testing • PAM3 analysis* • Power measurement and analysis • User-defined filters	• 10/100/100BASE-T Ethernet with Multi-lane* • 10BASE-T1L Industrial Ethernet* • Advanced jitter analysis • Power measurement and analysis • USB 2.0**	• Advanced jitter analysis • Automotive Ethernet PAM3 analysis* • Automotive Ethernet signal separation* • Automotive Ethernet compliance* • Inverter and motor drive analysis with DQ0 and mechanical measurements • Double pulse testing for wide bandgap semiconductors • Power measurement and analysis • 100BASE-T1 decoding • CAN, CAN FD, CAN XL decoding • CXPI decoding • FlexRay decoding • I3C decoding • LIN decoding • NRZ decoding • PSI5 decoding • SENT decoding	• Advanced jitter analysis • Mask/limit testing • ARINC 429 decoding • Manchester decoding • MIL-STD-1553 decoding • NRZ decoding • SpaceWire decoding

Ultimate Bundle (5-ULTIMATE-FL) – The most capability and greatest savings

- Includes Starter bundle and all Pro bundles
- PLUS: Record length extended to 500 Mpts/channel, Spectrum View RF vs. time waveforms, extended Spectrum View capture bandwidth, and video triggers

* Requires solid state drive with Windows operating system (Option 5-WIN)

Available Upgrades - 5 SERIES B MSO



Individual Options

Feature	Upgrade	Description
Upgrade Bandwidth Please see datasheet for option names	Upgrade to 500 MHz	Field upgradeable with software license. New front panel label with updated bandwidth.
	Upgrade to 1 GHz	Field upgradeable with software license. 1 GHz probe provided for each scope channel. New front panel label with updated bandwidth.
	Upgrade to 2 GHz	Send scope to service for 2 GHz hardware update. 1 GHz probe provided for each scope channel if original scope bandwidth less than 1 GHz. New front panel label with updated bandwidth.

Feature	Node-Locked License Upgrade	Description
Instrument Functions	SUP5-AFG	Add arbitrary function generator
	SUP5-RL-125M	Extend record length from 62.5 Mpts / channel to 125 Mpts / channel ²
	SUP5-RL-250M	Extend record length from 62.5 Mpts / channel to 250 Mpts / channel ²
	SUP5-RL-500M	Extend record length from 62.5 Mpts / channel to 500 Mpts / channel ²
	SUP5-WIN	Add removable SSD with Windows 10 license installed
Protocol Analysis Decode and search serial content. Some packages include hardware triggering as noted.	SUP5-RFNFC	NFC protocol decode and search
	SUP5-SR8B10B	8b10b serial decoding and analysis
	SUP5-SRAERO	Aerospace serial triggering and analysis (MIL-STD-1553, ARINC 429)
	SUP5-SRAUDIO	Audio serial triggering and analysis (I ² S, LJ, RJ, TDM)
	SUP5-SRAUTO	Automotive serial triggering and analysis (CAN, CAN FD, CAN XL, LIN, FlexRay)
	SUP5-SRAUTOEN1	100BASE-T1 Automotive Ethernet protocol decode software
	SUP5-SRAUTOSEN	Automotive sensor serial triggering and analysis (SENT)
	SUP5-SRCOMP	Computer serial triggering and analysis (RS-232/422/485/UART)
	SUP5-SRCPHY	MIPI C-PHY serial decoding and analysis
	SUP5-SRCXPI	CXPI serial decoding and analysis
	SUP5-SRDPHY	MIPI D-PHY (CSI/DSI) serial decode and analysis
	SUP5-SREMBD	Embedded serial triggering and analysis (I ² C, SPI)
	SUP5-SRENET	Ethernet serial triggering and analysis (10BASE-T, 100BASE-TX)
	SUP5-SRESPI	eSPI serial decoding and analysis
	SUP5-SRETHERCAT	EtherCAT serial decoding and analysis
	SUP5-SRI3C	MIPI I3C serial decoding and analysis
	SUP5-SRMANCH	Manchester serial decode and analysis
	SUP5-SRMDIO	Management Data Input/Output serial decoding and analysis
	SUP5-SRNRZ	NRZ serial decoding and analysis
	SUP5-SRONEWIRE	1-Wire serial decoding and analysis
	SUP5-SRPM	Power management serial triggering and analysis (SPMI)
	SUP5-SRPSI5	PSI5 serial decode and analysis
	SUP5-SRSDLC	Synchronous data link control (SDLC) serial decode and analysis
	SUP5-SRSMBUS	SMBus serial decoding and analysis
	SUP5-SRSPACEWIRE	SpaceWire serial decoding and analysis
	SUP5-SRSVID	Serial Voltage Identification (SVID) serial decoding and analysis
	SUP5-SRUSB2	USB 2.0 serial bus triggering and analysis (LS, FS, HS)
	SUP5-SREUSB2	Embedded USB2 (eUSB2) serial decoding and analysis

Most licenses are available as "Floating" versions to facilitate sharing among engineers within your company. Contact your Tektronix representative for additional information.

Available Upgrades - 5 SERIES B MSO



Individual Options

Feature	Node-Locked License Upgrade	Description
Serial Compliance/Conformance¹ Perform automated pass/fail testing or margin testing per common standards, with numerical results and full reports	SUP5-AUTOEN-SS	Automotive Ethernet signal separation
	SUP5-CMAUTOEN	Automotive Ethernet compliance test (100BASE-T1, 1000BASE-T1)
	SUP5-CMENET	Ethernet automated compliance test (10BASE-T, 100BASE-T, 1000BASE-T)
	SUP5-CMENETML ⁵	Ethernet (10BASE-T, 100BASE-T, 1000BASE-T)
	SUP5-CMINDUEN10	Industrial Ethernet (10BASE-T1L Long Reach) automated compliance test solution
	SUP5-CMUSB2	USB 2.0 automated compliance test
Advanced Analysis	SUP5-AUTOEN-BND ¹	Automotive Ethernet compliance, signal separation, PAM3 analysis (requires option 5-DJA), 100BASE-T1 serial decode
	SUP5-DBLVDS ^{1,4}	Automated LVDS test solution
	SUP5-DJA	Advanced jitter and eye analysis
	SUP5-DPM	Complete Digital Power Management (Includes all measurements in DPMBAS + Jitter and Eye Diagram Analysis)
	SUP5-DPMBAS	Basic Digital Power Management (Power Sequence Analysis, Transient Analysis and Ripple Analysis)
	SUP5-IMDA ³	Inverter Motor Drive Analysis
	SUP5-IMDA-DQ0 ^{3,6}	Add DQ0 measurements to IMDA
	SUP5-IMDA-MECH ³	Add mechanical measurements to IMDA
	SUP5-MTM	Mask testing
	SUP5-PAM3 ¹	PAM3 analysis
	SUP5-PS2	Power solution bundle (SUP5-PWR, THDP0200, TCP0030A, 067-1686-xx (deskew fixture))
	SUP5-PWR	Advanced power measurements and analysis
	SUP5-SV-BW-1	Increase Spectrum View Capture Bandwidth to 500 MHz
	SUP5-SV-RFVT	Spectrum View RF versus Time Analysis and Trigger
	SUP6-TDR	Time domain reflectometry (TDR) measurements and analysis
	SUP5-UDFLT	User-defined filter creation tool
	SUP5-VID	NTSC, PAL and SECAM video triggering
	SUP5-WBG-DPT	Wide bandgap SiC/GaN double pulse test measurements
Digital Voltmeter	SUP5-DVM	Add digital voltmeter / trigger frequency counter (Free with product registration at www.tek.com/register5mso)

1. Option 5-WIN or upgrade SUP5-WIN required. 2. Additional upgrades are available from any record length to any greater record length. See datasheet for details. 3. This option not compatible with MS054 or MS054B. 4. Option 5-DJA required. 5. Option 5-CMENET required. 6. Option 5-IMDA required.

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