

# 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
  - Ethernet
  - eUSB2
  - I<sup>2</sup>C
  - I2S Audio
  - I3C
  - Manchester
  - MDIO
  - MIPI C-PHY
  - MIPI D-PHY 1.2 (CSI/DSI)
  - NRZ
  - PSI5
  - RS-232 / UART
  - SDLC
  - SENT
  - SpaceWire
  - SPI
  - SPMI
  - SVID
  - USB 2.0



## Advanced Analysis

- Advanced Jitter
- Serial Bus Compliance/Conformance
- Advanced Power Analysis
- Inverters, Motors and Drives
- Wideband Spectrum Analysis
- RF vs Time Analysis and Triggering
- Vector Signal Analysis

## 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

## 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

# SAVE WITH APPLICATION BUNDLES

Eight Application Bundles deliver outstanding value. Available with 1-year or perpetual licenses.

## Starter Bundle (5-STARTER-1Y or -PER) – Capabilities that most engineers will find valuable

- Serial trigger, decode, search and event table analysis on I<sup>2</sup>C, 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-1Y or -PER)	Power (5-PRO-POWER-1Y or -PER)	Signal Integrity (5-PRO-SIGNAL-1Y or -PER)	Standards Compliance (5-PRO-COMPL-1Y or -PER)	Automotive (5-PRO-AUTO-1Y or -PER)	Aerospace (5-PRO-MILGOV-1Y or -PER)
<ul style="list-style-type: none"> <li>• 1-Wire</li> <li>• 8b10b</li> <li>• Audio</li> <li>• CAN, CAN FD</li> <li>• Ethernet</li> <li>• eUSB</li> <li>• FlexRay</li> <li>• I3C</li> <li>• LIN</li> <li>• Manchester</li> <li>• MDIO</li> <li>• MIPI C-PHY</li> <li>• MIPI D-PHY</li> <li>• NRZ</li> <li>• SDLC</li> <li>• SPMI</li> <li>• SVID</li> <li>• USB 2.0</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced power analysis</li> <li>• Digital power management analysis</li> <li>• Inverter &amp; motor drive analysis with DQ0 measurements</li> <li>• SPMI decoding</li> <li>• SVID decoding</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced jitter analysis</li> <li>• LVDS debug*</li> <li>• Mask/limit testing</li> <li>• PAM3 analysis*</li> </ul>	<ul style="list-style-type: none"> <li>• 10/100/100BASE-T Ethernet with Multi-lane*</li> <li>• 10BASE-T1L Industrial Ethernet*</li> <li>• USB 2.0**</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced jitter analysis</li> <li>• Automotive Ethernet PAM3 analysis*</li> <li>• Automotive Ethernet signal separation*</li> <li>• Automotive Ethernet compliance*</li> <li>• Inverter &amp; motor drive analysis with DQ0 measurements</li> <li>• 100BASE-T1 decoding</li> <li>• CAN, CAN FD decoding</li> <li>• FlexRay decoding</li> <li>• I3C decoding</li> <li>• LIN decoding</li> <li>• NRZ decoding</li> <li>• PS15 decoding</li> <li>• SENT decoding</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced jitter analysis</li> <li>• Mask/limit testing</li> <li>• ARINC 429 decoding</li> <li>• Manchester decoding</li> <li>• MIL-STD-1553 decoding</li> <li>• NRZ decoding</li> <li>• SpaceWire decoding</li> </ul>

## Ultimate Bundle (5-ULTIMATE-1Y or -PER) – 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 MSO

## Individual Options

Feature	Upgrade	Description	Upgrade Option Details
Upgrade Bandwidth	SUP5-BWxTy8	Bandwidth upgrade for 8-channel 5 Series MSO from x to y, where x and y are the hundreds of MHz	<b>Bandwidth upgrades</b> <ul style="list-style-type: none"> <li>Up to 1 GHz upgrades can be performed in the field by installing a software license.</li> <li>2 GHz upgrade requires installation at a Tektronix Service Center via option IFC or IFCIN.</li> <li>Bandwidth upgrades from 350 or 500 MHz to 1 or 2 GHz also include one TPP1000 1 GHz passive probe per instrument channel.</li> </ul>
	SUP5-BWxTy6	Bandwidth upgrade for 6-channel 5 Series MSO from x to y, where x and y are the hundreds of MHz	
	SUP5-BWxTy4	Bandwidth upgrade for 4-channel 5 Series MSO from x to y, where x and y are the hundreds of MHz	

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 <sup>2</sup>
	SUP5-RL-250M	Extend record length from 62.5 Mpts / channel to 250 Mpts / channel <sup>2</sup>
	SUP5-RL-500M	Extend record length from 62.5 Mpts / channel to 500 Mpts / channel <sup>2</sup>
	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-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 <sup>2</sup> S, LJ, RJ, TDM)
	SUP5-SRAUTO	Automotive serial triggering and analysis (CAN, CAN FD, 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-SRDPHY	MIPI D-PHY (CSI/DSI) serial decode and analysis
	SUP5-SREMBD	Embedded serial triggering and analysis (I <sup>2</sup> C, SPI)
	SUP5-SRENET	Ethernet serial triggering and analysis (10BASE-T, 100BASE-TX)
	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-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 MSO

## Individual Options

Feature	Node-Locked License Upgrade	Description
<b>Serial Compliance/Conformance<sup>1</sup></b> 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 <sup>5</sup>	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
<b>Advanced Analysis</b>	SUP5-AUTOEN-BND <sup>1</sup>	Automotive Ethernet compliance, signal separation, PAM3 analysis (requires option 5-DJA), 100BASE-T1 serial decode
	SUP5-DBLVDS <sup>1,4</sup>	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 <sup>3</sup>	Inverter Motor Drive Analysis
	SUP5-IMDA-DQ0 <sup>3,6</sup>	Add DQ0 measurements to IMDA
	SUP5-MTM	Mask testing
	SUP5-PAM3 <sup>1</sup>	PAM3 analysis
	SUP5-PS2	Power solution bundle (SUP6-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
<b>Digital Voltmeter</b>	SUP5-DVM	Add digital voltmeter / trigger frequency counter (Free with product registration at <a href="http://www.tek.com/register5mso">www.tek.com/register5mso</a> )

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 MSO54. 4. Option 5-DJA required. 5. Option 5-CMENET required. 6. Option 5-IMDA required.

[www.tek.com/5SeriesMSO](http://www.tek.com/5SeriesMSO)

Copyright © 2021, Tektronix. All rights reserved. Tektronix and Keithley 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, TEK and Keithley are registered trademarks of Tektronix, Inc. All other trade names referenced are the service marks, trademarks or registered trademarks of their respective companies.

03/21 SBG 55W-61103-13

