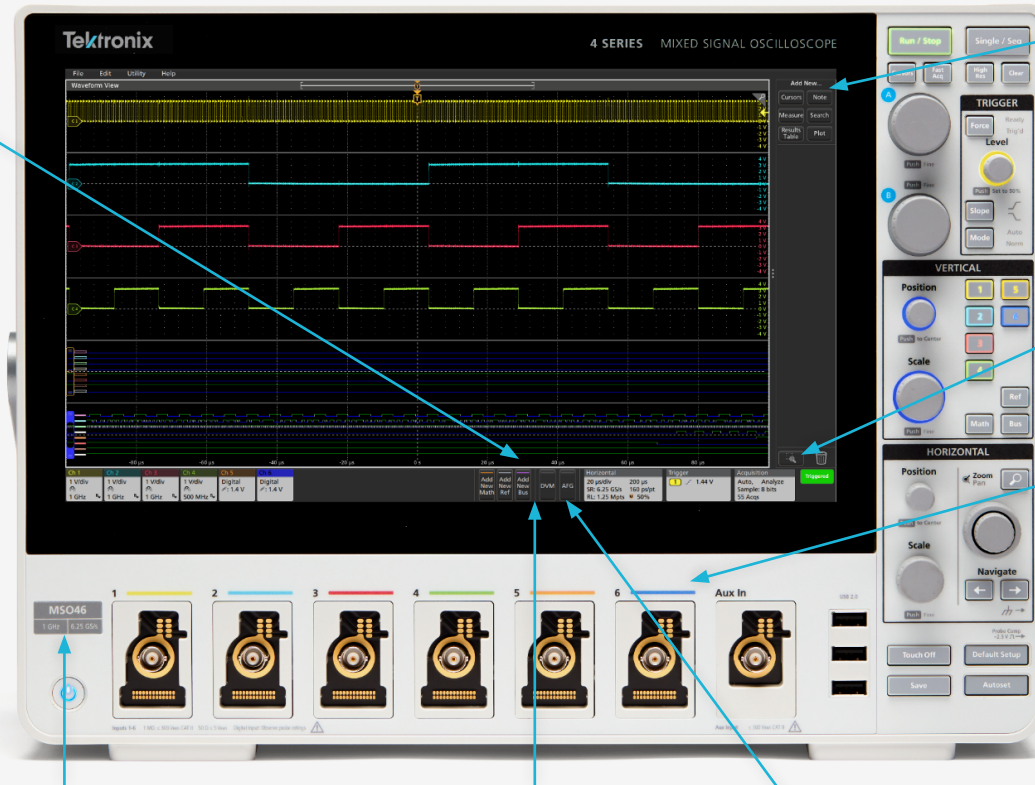


# UPGRADES AVAILABLE AFTER PURCHASE

Upgrade as your needs change

## Protocol Decoding

- Serial bus decoding
  - 1-Wire
  - ARINC 429
  - Automotive Ethernet
  - CAN / LIN / FlexRay
  - Ethernet
  - eUSB2
  - I<sup>2</sup>C
  - I2S Audio
  - I3C
  - Manchester
  - MDIO
  - MIL-STD-1553
  - NRZ
  - PS15
  - RS-232 / UART
  - SDLC
  - SENT
  - SpaceWire
  - SPI
  - SPMI
  - SVID
  - USB 2.0



## Advanced Analysis

- Advanced Power Analysis
- 3-Phase Power Analysis
- Wideband Spectrum Analysis
- RF vs Time Analysis and Triggering

## Double Record Length

Increase to 62.5 Mpts / channel

## Add TLP058 Logic Probes

Access 8 digital channels on any FlexChannel® input

## Bandwidth Upgrades

- 350 MHz
- 500 MHz
- 1 GHz
- 1.5 GHz

## Digital Voltmeter / Trigger Frequency Counter

Free with product registration

## Arbitrary / Function Generator

# SAVE WITH APPLICATION BUNDLES

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

## Starter Bundle (4-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

## Four Pro Bundles – Designed for specific applications and industries

- Choose one of the four bundles below to fit your application.
- Each includes the Starter Bundle (above).
- Each extends record length to 62.5 M/ch.

### Serial Protocol Decoding and Analysis

(4-PRO-SERIAL-1Y or -PER)

- 1-Wire
- Audio
- CAN, CAN FD
- Ethernet
- eUSB
- FlexRay
- I3C
- LIN
- Manchester
- MDIO
- NRZ
- SDLC
- SPMI
- SVID
- USB 2.0

### Power

(4-PRO-POWER-1Y or -PER)

- Advanced power analysis
- 3-Phase power analysis
- SPMI decoding
- SVID decoding

### Automotive

(4-PRO-AUTO-1Y or -PER)

- CAN, CAN FD decoding
- FlexRay decoding
- I3C decoding
- LIN decoding
- NRZ decoding
- PSI5 decoding
- SENT decoding

### Aerospace

(4-PRO-MILGOV-1Y or -PER)

- Mask/limit testing
- ARINC 429 decoding
- Manchester decoding
- MIL-STD-1553 decoding
- NRZ decoding
- SpaceWire decoding

## Ultimate Bundle (4-ULTIMATE-1Y or -PER) – The most capability and greatest savings

- Includes Starter bundle and all Pro bundles
- PLUS: Spectrum View RF vs. time waveforms, extended Spectrum View capture bandwidth, and video triggers

# AVAILABLE UPGRADES – 4 SERIES MSO

## Individual Options

Feature	Upgrade	Description	Upgrade Option Details
Upgrade Bandwidth	4-BWxTy4	Bandwidth upgrade for 4-channel 4 Series MSO from x to y, where x and y are hundreds of MHz	All bandwidth upgrades can be performed in the field by installing a software license
	4-BWxTy6	Bandwidth upgrade for 6-channel 4 Series MSO from x to y, where x and y are hundreds of MHz	

Feature	Node-Locked License Upgrade	Description
Instrument Functions	SUP4-AFG	Add arbitrary function generator
	SUP4-RL-1	Extend record length to 62.5 Mpts / channel
Protocol Analysis Decode and search serial content. Some packages include hardware triggering as noted.	SUP4-SRAERO	Aerospace serial triggering and analysis (MIL-STD-1553, ARINC 429)
	SUP4-SRAUDIO	Audio serial triggering and analysis (I <sup>2</sup> S, LJ, RJ, TDM)
	SUP4-SRAUTO	Automotive serial triggering and analysis (CAN, CAN FD, LIN, FlexRay and CAN symbolic decoding)
	SUP4-SRAUTOSEN	Automotive sensor serial triggering and analysis (SENT)
	SUP4-SRCOMP	Computer serial triggering and analysis (RS-232/422/485/UART)
	SUP4-SREMBD	Embedded serial triggering and analysis (I <sup>2</sup> C, SPI)
	SUP4-SRENET	Ethernet serial triggering and analysis (10BASE-T, 100BASE-TX)
	SUP4-SRI3C	MIPI I3C serial decode and analysis
	SUP4-SRMANCH	Manchester serial decode and analysis
	SUP46-SRMDIO	Management Data Input/Output (MDIO) serial decode and analysis
	SUP4-SRRNZ	NRZ serial decode and analysis
	SUP4-SRONEWIRE	1-Wire serial decoding and analysis
	SUP4-SRPM	Power management serial triggering and analysis (SPMI)
	SUP4-SRPSI5	PSI5 serial decode and analysis
	SUP4-SRSDLC	Synchronous data link control (SDLC) decode and analysis
	SUP4-SRSPACEWIRE	SpaceWire serial analysis
	SUP4-SRSVID	Serial Voltage Identification (SVID) serial decode and analysis
	SUP4-SRUSB2	USB 2.0 serial bus triggering and analysis (LS, FS, HS)
	SUP4-SREUSB2	Embedded USB2 (eUSB2) serial decode and analysis
	Advanced Analysis	SUP4-3PHASE
SUP4-MTM		Mask and limit testing
SUP4-PWR-BAS		Power measurements and analysis
SUP4-PWR		Advanced power measurements and analysis
SUP4-PS2		Power solution bundle (SUP6-PWR, THDP0200, TCP0030A, 067-1686-xx (deskew fixture))
SUP4-SV-BW-1		Increase Spectrum View capture bandwidth to 500 MHz
SUP4-SV-RFVT		Spectrum View RF versus Time analysis
Digital Voltmeter	SUP4-VID	NTSC, PAL, and SECAM video triggering
	SUP4-DVM	Add digital voltmeter / trigger frequency counter (Free with product registration at <a href="http://www.tek.com/register4mso">www.tek.com/register4mso</a> )

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

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