



DigiView™ DV3500 Logic Analyzer

250/500 Msps, 36/18 Channel Logic Analyzer with Protocol Decoding and Hardware Compression

Product Summary:

New Model:

Fanless operation, lower power consumption, double the memory and 25% faster than model DV3400.

Description:

Professional USB Logic Analyzer and Protocol Analyzer with two sample modes: 250 Msps/36 Channels or 500 Msps/18 Channels. DV3500 offers more features and a better price than traditional stand-alone units.

Manufactured By:

TechTools, Rowlett, Texas, U.S.A.

DV3500 Hardware Specifications

Sample Rate (Msps)	250 @ 36 ch 500 @ 18 ch
Sample period (ns)	4 @ 36 ch 2 @ 18 ch
Channels	36
Channels per Cable Pod (x Pods per unit)	9 (x4)
Threshold Circuits	2
Adjustable Threshold	-5V to +5V
Threshold Accuracy	+/- 250mv
Trigger Output (BNC)	Yes
Trigger position	Selectable (0-100%)
Buffer Size	Selectable (1-100%)
Raw Memory	36 Mbit (1M x 36)
Real-time Compression	Yes, Tri-mode (varies according to transition frequency, duration of changes and duration of constant change)
Sample Depth (SR: Sample Rate, DR: Data Rate, Q: Quadrillion or 10 ¹⁵)	
Theoretical Min (SR = DR)	1M x 36 2M x 18
Practical Min (SR = 4 x DR)	2M x Channel width
@ DR = 25Mbps (40ns)	4M x 36 8M x 18
@ DR = 10Mbps (100ns)	10M x 36 20M x 18
@ DR = 100Kbps	1B x 36

(10us)	2B x 18
@ DR = 10Kbps (100us)	10B x 36 20B x 18
Theoretical Max (DR approaches 0) (Quadrillion)	5Q @ 4ns 18Q @ 2ns (520 days)
Typical Captures @ Full Resolution (data type / count stored in hardware buffer)	
0.1Hz clocks	262,000
1KHz clocks	262,000
5KHz clocks	262,000
25MHz clocks	262,000
Async characters	94,000
I ² C characters	20,000
Sync characters	24,000
8051 Bus cycles	80,000
Trigger Circuitry	
Operating speed (MHz)	250
Min Data Valid for Pattern Match (ns)	4
Min Data Valid for Edge Detection (ns)	4
Electrical	
Impedance	50KOhms // < 4pF
Power Source	External (5 VDC - auto-reset overvoltage and AC protection)
Power (Idle / Active)	< 2 Watt / < 3 Watt
Maximum voltage (Continuous, all channels)	+50 Volts
Ground current Protection (ground lead to +- voltage)	Yes, +-12 Volts
Anti-static protection	Yes
Connection Type, Speed	USB 2.0 @ 480 Mbps
Mechanical	
Size (LxWxH)	5.0" x 4.25" x 1.40"
Materials	Extruded Aluminum
Trigger Specifications:	
Trigger Sequencers	Configurable: 1 @16 stages, OR 4@4 stages, OR 2@8 stages, OR 1@8 and 2@4 stages, OR 1@12 and 1@4 stages
Trigger Match Circuits	8 Universal Match Circuits. Each Circuit can be configured for any of the following: <ul style="list-style-type: none"> Edge Detect (Full Channel Width - OR: rising, falling, either) <ul style="list-style-type: none"> Patterns (Full Channel Width - AND: 0, 1, X)

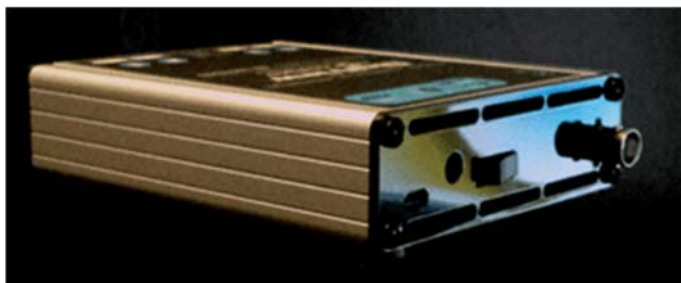
	<ul style="list-style-type: none"> • Stable (Full Channel Width) • > , >=, <, <=, <> (Full Channel Width)
Match Duration	<p>Yes</p> <ul style="list-style-type: none"> - 1 per match circuit - up to 1M samples each
Trigger Pass Count	Yes (up to 1 Million per Sequencer stage)
Trigger Output Sources	<p>Seq 1, OR Seq 2, OR Seq 3, OR Seq4</p> <p>OR (8 input sum-of-8 input products of all 8 match circuits)</p>

Additional Details



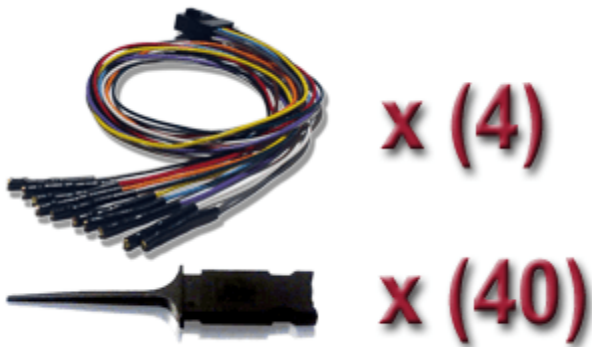
Front View:

Channel Connectors, POWER LED, ARMED LED, TRIGGER LED, Enumerated LED



Rear View:

USB connection, Power switch and +5 VDC connection, Trigger Out BNC Connection



Cables & Clips Included:

High Quality, flexible, connectorized cables and a full set of micro-clips are included with each Logic Analyzer

Software Included:

Our professional Capture and Analysis Software is included with each Logic Analyzer

The DV3500 is our top of the line Digital Logic Analyzer. This model has more memory, compression, data width, speed and trigger capabilities than our other Logic Analyzers as well as a wider voltage range.

Having double the memory and a 25% faster sample rate than model DV3400 and selling for the same price, makes the new DV3500 an ideal replacement.

Key Hardware Features:

- Selectable Sampling Mode: 250/500 Msps
- Physical Channels: 36/18 Channels
- Two Independent Threshold adjustment groups
- Greater Threshold adjustment range (+- 5 volts)
- Wider voltage tolerance range (+- 50 volts)
- Tri-Mode, Intelligent Compression
- Auto-resetting Ground current Protection
- Extra ESD protection
- Channels are Reverse-Voltage protected
- Channels are Over-Voltage protected
- Impedance: 50 KOhms // < 4pF
- Trigger Out (BNC)
- Raw memory: 36 Mbit
- External Power: Capture while PC is OFF
- Power Input: 5 VDC (auto-reset overvoltage and AC protection)