

LeCroy VBA, CANBUS TD/TDM Specifications, Vs. 1.6			
	CANbus TD	CANbus TDM	Vehicle Bus Analyzer
Decode Capability			
Format	Hexadecimal	Hexadecimal	Synthetic (Message and Signal level) or Hexadecimal. Synthetic decodes performance on waveform and using user provided ODBC database file.
# of Decoded Waveforms	CAN Trace + Zoom of CAN Trace	CAN Trace + Zoom of CAN Trace	Up to 4 sources may be decoded at one time. Sources can be Channels, Memory Decoded Waveforms, or Made Traces (e.g. CANH-CANL). In addition, up to 4 Zooms of These traces can be displayed with decoder information.
Location	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	Above Waveform, or Grid, Next to defined events.
Visual Aid	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	Color Coding by FORMAT, ID, DLC, DATA, CRC, ACK, Stuff Bits. Includes textual Message name and physical signal value with units.
Error Frame Decoding	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	Decode Unrecognized Patterns, Identify errors.
Stuff Bit Display	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	Yes, Cited on Challenge Display
Symbolic Trigger Capability			
DATA Frame Setup	-	-	Yes
Message Condition Setup	-	-	Specify a Message to trigger on using customer supplied ODBC database file. Choose from list sorted by Node, Message, or Signal.
GM CAN Compatibility	-	-	GM CAN compatible (Priority ID, Parameter ID, Source ID). Defaults to Message triggered with all GM ID fields set "don't care" with operator able to change, as desired.
Mixed Message Systems Capability	-	-	Supports triggering when both 11-bit and 29-bit IDs are on the bus.
Signal Condition Setup	-	-	Message+Signal with Signal data value condition of <=, <, =, >, >=, -> in range, don't care. Signal values set in scaled units as defined in customer supplied ODBC database file.
Error Frame Setup	-	-	Yes, all Active Errors
Remote Frame Setup	-	-	Yes, with Message + condition.
All Frames Setup	-	-	Yes, will trigger on any CAN Data, Remote or Error Frame (no conditions suitable)
End of Frame (EOF) Trigger	-	-	Yes By using ALL frame triggering)
Hexadecimal Trigger Capability			
DATA Frame Setup	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	-
ID Condition Setup	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	Specify One ID, then <=, <, =, >, >=, -> in range, don't care.
Mixed ID Systems Capability	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	Supports triggering when both 11-bit and 29-bit IDs are on the bus.
DATA Condition Setup	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	<=, <, =, >, >=, -> in range, out of range, don't care. Trigger on LID or MID bits in any condition. Possible with ID condition only.
DATA Setup	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	Hexadecimal, DLC from 0-8. In full bytes, data pattern can be set to any value. In partial bytes, data pattern has to be set to any Start bit, with a 24 bit data length. Binary. Any combination of 0/L or X for 1-64 bits
Error Frame Setup	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	Yes, all Active Errors
Remote Frame Setup	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	Yes, with any ID condition (<=, <, =, >, >=, -> in range, out of range, don't care)
All Frames Setup	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	Yes, will trigger on any CAN Data, Remote or Error Frame (no conditions suitable)
Start of Frame (SOF) Trigger	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	Yes By using ALL frame triggering)
Logical AND	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	Yes, but only between ID and condition
Trigger Setup			
Format	same as CANbus TDM	ID - Hexadecimal, DATA - Hexadecimal or Binary	ID: Symbolic, Hexadecimal, Binary, DATA: Symbolic, Hexadecimal or Binary
ID Types	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	STD (11-bit), EXT (29-bit)
Bit Rates	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	Any of 434 bit rates, ranging from 10.0 Kbits/s to 1 Mbps.
Data Spread	same as CANbus TDM	In Hexadecimal, can set any value, spread across nibbles or bytes, up to 24 bits long. In binary, can set any value, spread across nibbles or bytes, up to 64 bits long.	In Symbolic, can select any Signal up to 24 bits long. In Hexadecimal, can set any value, spread across nibbles or bytes, up to 24 bits long. In binary, can set any value, spread across nibbles or bytes, up to 64 bits long.
Adjustable Sample Point	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	Fully adjustable
Trigger Input	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	Any I/O or EXT
Trigger (Other)	-	-	-
Trigger Design	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	External CAN controller using library (triggering on protocol message)
Will Trigger Provide ACKnowledge on Bus?	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	User selectable, defaults to No ACK
CAN Transceiver Support	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	570K, 25k, 120K, 10K, 194K, BDI00115 Interchangeable
Measurements & Graphing			
CAN Measurements	-	Same as Vehicle Bus Analyzer	CAN Message to Avoiding Signal Timing, Awaiting Signal to CAN Message Timing, CAN Message to CAN Message Timing, CAN Bus Load %, CAN Message Bit Rate, CAN Message Number, CAN Message Data to Decline Value Extension
Statistical Analysis	-	Same as Vehicle Bus Analyzer	Histograms (up to 20 decimal events)
Statistical Parameters	-	Same as Vehicle Bus Analyzer	Mean, Max, Min, Avg, Std Bias, Not max, Not min, Not mean, Not median, Not bias, Not rms, Not std dev, Not bin, Most probable, mode, percentile, percent
Graphical Analysis	-	Same as Vehicle Bus Analyzer	Trace (1 point per measurement) Trend (1 millisecond trend)
Analysis Capability			
Maximum Record Length	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	2Mbytes (VBA000A) or 25 Mbytes (VBAK Interface). This equals 80% of 100MB CAN traffic, or 24,000 CAN messages
Stuff Bit Display	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	Yes
Sequence Mode	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	Yes, View recorded data on individual sequences
Pattern Search	same as CANbus TDM	In Hexadecimal, Search for next frame, next defined frame with a certain ID, or next error frame	In Symbolic or Hexadecimal, Search for new frame, next defined frame with a certain MessageID, or next error frame
Other Features			
CAN Input to View	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	Single-ended (CANH or CANL), Single-ended (CANH-L), or Differential Probe
Differential Probe Required?	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	No, but helpful to ease analog channels and to perform sequence mode acquisition. ADP-200 recommended
Method of Viewing CAN Signal & Triggering On It	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	Trigger with CANbus TO Status Trigger Mode, Sequentially Probe to View
Forward Compatibility	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	External Trigger Module Allows System to Adapt
User Interface	same as Vehicle Bus Analyzer	Same as Vehicle Bus Analyzer	Graphic, Windows Based
Compatible With	Option, compatible with WRX1, WR600DA and WavePro 7000A	Option, compatible with WRX1, WR600DA and WavePro 7000A	Stand Alone Computer CAN software/system based on WaveAnalyzer XI or 6000A