ZEUS+™ EEMS348

BID SPECIFICATION



Snap-on® ZEUS+™ Diagnostic and Information System

PRODUCT FEATURES

- Upgradeable ShopStream[®] integrated diagnostic software suite, compromising: scanner, scope, component test, data manager, TSBs, SureTrack[®] information, vehicle history and optional repair information system
- 4-channel lab/ignition scope
- Graphing scan tool with wireless scan module
- Web access to SureTrack expert information system
- Web access to Technical Service Bulletin database
- Web access to Oil Specs and Resets
- Oil Specs and Reset data
- Domestic and Asian Fast-Track® Troubleshooter
- Fast-track Reference Database
- Digital Graphing Multimeter
- Customer/Vehicle information database application
- Data manager application
- Wi-Fi capable and open Internet browser
- Factory-installed Antivirus Security Essentials

DISPLAY TABLET

- 11.6" Color LCD, 1920x1080 capacitive touchscreen
- 1.2 GHz base freq, 3.0 GHz burst freq, 64 bit, Quad-Core Intel® Pentium processor
- 128 GB internal Solid-State Drive
- Internal battery with approx. 9 hour run time
- Power-saving Ready Mode with 5 second startup
- Internal audio microphone and stereo speakers
- USB-C port for power, display, and audio
- Two USB 3.0 ports for peripheral device connection
- 802.11b/g/n wireless and Bluetooth® dual band 5.0 and legacy 2.1 communication

SYSTEM & USER INTERFACE

- Windows®-Embedded Standard 10 operating system
- Open system allows user-installed software
- Application multitasking capability
- · User-specified display options
- Touchscreen navigation
- On-screen virtual keyboard

SCAN TOOL SOFTWARE SPECIFICATIONS

- Instant ID (Auto ID using Mode 9 VIN)
- Oil Specs and Reset data

- One-Touch full-vehicle code scan & clear for covered makes and systems
- SureTrack includes Real Fixes and verified parts replacement records harvested from millions of actual completed repair orders. Expert information that can help anyone, regardless of experience level and is included every time you upgrade to the current version of software.
- Reads & clears OBD-II and OEM-specific trouble codes
- Displays complete trouble code descriptions
- Displays from one to sixteen live data parameters (PIDs) simultaneously in enhanced graphing mode
- Adjustable sweep; Min/Max capture in graphing mode
- Includes functional tests, bi-directional controls and reset/relearns
- · Save codes, data movies and screen images

VEHICLE COVERAGE

Refer to the latest Vehicle Coverage Guide

POWER/WEIGHT/DIMENSIONS

Display Tablet

Power: 10.8V Lithium-ion battery pack
Dimensions: 12.4""W x 7.8""H x 1.7""D

• Weight: 4.1 lbs - with battery"

Scope Module

• Power: 5VDC supplied through Display Tablet connection

• Dimensions: 4.3""W x 4.9""H x 1.3""D

• Weight: 0.5 lbs"

Scan Module

 Power: 12-24VDC supplied through vehicle data link connector

• Dimensions: 4.0""L x 0.92""H x 1.85""W

• Weight: 0.22 lbs"

LAB SCOPE SPECIFICATIONS

Captures and displays live signals up to four waveforms on screen in real time

- 4 Channels
- 6 MSPS Sample Rate
- 3 MHS Bandwidth
- Displays digital readout along with each waveform to determine voltage at the selected point on the waveform
- Color-coded waveform for each channel
- Manual & automatic display configuration for each channel
- Snapshot: Capture data over time saved into a buffer
- Easy Scroll: Streamlines selection of menu and toolbar
- AC Coupling: Provides the ability to enlarge the alternating current (AC) component of a signal for closer examination
- Invert: Flip waveform to adjust for flexible hookups and easier viewing
- Autofind: Automatically pre-configure the vertical scale
- Load Configuration: Select factory preset screens or define
 a custom setup and retrieve them as needed diagnostic
 tasks most frequently performed on specific components
 can be selected to view the performance of sensors,
 actuators and circuits on a vehicle a custom setup and
 retrieve them as needed diagnostic tasks most
 frequently performed on specific components can be
 selected to view the performance of sensors, actuators
 and circuits on a vehicle
- Peak Detect: User selectable for capturing hi-speed signals

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DIGITAL & GRAPHING MULTIMETER SPECIFICATIONS

- Auto scaling, high-impedance multimeter
- Digital and graphing display of results
- Pinpoint measurement of:
 - DC volts, AC Volts RMS, Ohms, Frequency, Pulse-width, Injection pulse-width, Duty cycle
 - Interface for optional amp probe and pressure/vacuum transducers
 - o Continuity tester with audible beep

OPTIONAL ACCESSORIES

- Device Stand w/USB-C HUB EAK0380L15A
- Precision Low Amps Probe EETA308D
- Drawer Organizers for KRSC3 Series Carts ZEUSPFOAM3
- Drawer Organizers for KRSC4 Series Carts ZEUSPFOAM4
- USB-C Hub Adapter 2-06939A
- Kit, EESM306B Compact Scan Module, S9 EAK0355L10B
- Replacement Screen Protector, Tempered Glass

 EAC0147L04A1
- USB-C Cable 6-23622A
- Portable 5-Gas Analyzer EEEA305APC
- Extended Warranty
- ShopKey Pro Repair Information System

OPTIONAL ACCESSORIES – SCAN TOOL

- Domestic/Asian OBD-I Adapter Kit EAK0351L01B
- European Vehicle Adapter Kit EAK0351L02B
- Adapter for Kia ABS & Airbag EAA0355L92A
- Scanner Simulation/Demo Prop EESX306SC
- Harley-Davidson Adapter Kit EAK0347L01A

OPTIONAL ACCESSORIES – IGNITION ADAPTERS

- Ignition Scope Lead Set EAK0294B09A
- EETA309A15 Multiple Ignition Lead Module Ignition adapters
- EETM306A03 COP-1 Ford
- EETM306A04 COP-2 Chrysler
- EETM306A05 CIC-2 Honda, Toyota
- EETM306A06 CIC-1 GM
- EETM306A07 COP-3 Audi, VW
- EETM306A08 COP-4 Acura/Honda, Isuzu
- EETM306A09 COP-5 Volvo/BMW
- EETM306A10 COP-6 Mercedes
- EETM306A11 COP-7 Mercedes Dual
- EETM306A12 COP-8 BMW
- EETM306A13 COP-9 Lexus
- EETM306A14 COP-11 Audi, BMW, Chrysler, Jeep, Lexus, Mercedes, Saab, Toyota, Volvo, VW

OPTIONAL ACCESSORIES – LAB SCOPE/METER

- Extended Scope Leads EETA108B
- Precision Low Amp Current Probe EETA308D
- Pressure Transducer 100 PSI EEPV302AL
- Pressure Transducer 500 PSI EEPV302AT
- Pressure Transducer 5000 PSI EEPV302AH
- Pressure Transducer Cable EAX0024B10A
- Pressure Transducer Extension Cable (6ft) EAX0024B30A
- Ignition Scope Lead Kit EAK0294B09A
- Secondary Coil Adapter Lead EETA309A05A
- Secondary Ignition Clip-on Wire Adapter EETM306A02

- Coil-in-Cap (CIC-2) Ignition Pickup EETM306A05
- RCA Adapter 2-12203A
- Split Lead Adapter 6-03622A01
- Scope Simulation/Demo Prop EESX306SP

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SCOPE/METER SYSTEM SPECIFICATIONS

MULTIMETER

Function	Range	Comments
Channels	1 – 2	Common Ground
Campile Date	6.0 MSPS	Simultaneous
Sample Rate —	1.5 MSPS	Continuous per channel
Bandwidth	DC – 3 MHz	3 db point @ 3 MHz
Input Impedance	10 MΩ @ DC	— All channels
	5.8 kΩ @ 3MHz	All Channels
V dc (Full Scale)	75 V maximum	
V ac (Full Scale)	50 V maximum	
Peak to Peak Voltage	30 V Maximum	

DIGITAL METER OHMS AND DIODE CONTINUITY TESTS

Function Range		Comments
Channels	3-4	Inputs between channels 3 (-) and 4 (+)
Input Impedance	10 ΜΩ	
Glitch capture	Approximately 50 mS	
Ohms	$400~\Omega-4~\text{M}\Omega$	Fixed scales or Auto Ranging
Diode Test	2 V Scale	

GRAPHING MULTIMETER

Function	Range	Comments	
Input Channels	1 – 2		
Input Impedance	10 Megohm		
Volts (DC)	400 mV thru 400V*	Auto Ranging	
Frequency	5 Hz thru 50 KHz	Auto Threshold Setting	
Pulse Width	5 ms thru 2 s	Auto Threshold Setting	
Inj Pulse Width	5 ms thru 2 s		
MC Dwell (60)	20 - 40 - 60 degrees	Auto Threshold Setting	
MC Dwell (90)	30 - 60 - 90 degrees	Auto Threshold Setting	
Duty Cycle	20 - 40 - 60 - 80 - 100%	Auto Threshold Setting	
Low Amps (20)	1 - 2 - 5 - 10 - 20A	With EETA308D	
Low Amps (40)	10 – 20 - 40A	With EETA308D	
Low Amps (60)	10 - 20 - 40 - 60A	With EETA308D	
Vacuum	5 - 10 - 20 in Hg	Sensor specific	
100 psi Pressure	10 - 25 - 50 - 100 PSI	Sensor specific	
500 psi Pressure	50 - 100 - 250 - 500 PSI	Sensor specific	
5000 psi Pressure	500 - 1000 - 2500 - 5000 PSI	Sensor specific	

^{*} See Safety Warnings in ZEUS+ user manual

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LAB SCOPE

Function	Range	Comments	
Channels	1 - 4	Common Ground	
Bandwidth	DC - 3 MHz	3 db point @ 3 MHz	
Innut Impedance	10 MΩ @ DC	All abannala	
Input Impedance ———	4 kΩ @ 3MHz	All channels	
	400 Volts		
	200 Volts		
	100 Volts		
VDC (full scale)	50 Volts		
Do not test greater than 75Vdc	20 Volts		
	10 Volts		
VAC (full scale)	5 Volt		
Peak to Peak Voltage	2 Volt		
Do not test greater than 50Vac (rms)	1 Volt		
	500 millivolt		
	200 millivolt		
	100 millivolt		
Secondary Ignition	1 – 50 KV	Channels 1 and 2	

LAB SCOPE SPECIFICATIONS BY SWEEP RATE

Sweep	Channels	Data points per screen	Buffer storage/Ch	Max # Screens	Total time ¹	Sample rate ²	Peak Detect ³
50 µs	Ch 1 only	300	2,097,152	6990	349.5 ms	6.0 MHz	N
100 µs	Ch 1,2 only	300	1,048,576	3495	349.5 ms	3.0 MHz	N
200 µs	Ch 1,2,3,4	300	524,288	1747	349.5 ms	1.5 MHz	N
500 µs	Ch 1,2,3,4	500	524,288	1048	524 ms	1.0 MHz	N
1 ms	Ch 1,2,3,4	500	524,288	1048	1.05 S	500 KHz	Υ
2 ms	Ch 1,2,3,4	500	524,288	1048	2.1 S	250 KHZ	Υ
5 ms	Ch 1,2,3,4	500	524,288	1048	5.2 S	100 KHz	Υ
10 ms	Ch 1,2,3,4	500	524,288	1048	10.5 S	50 KHz	Υ
20 ms	Ch 1,2,3,4	500	524,288	1048	21.0 S	25 KHz	Υ
50 ms	Ch 1,2,3,4	500	524,288	1048	52.4 S	10 KHz	Υ
100 ms	Ch 1,2,3,4	500	524,288	1048	1.75 M	5 KHz	Υ
200 ms	Ch 1,2,3,4	500	524,288	1048	3.5 M	2.5 KHz	Υ
500 ms	Ch 1,2,3,4	500	524,288	1048	8.7 M	1.0 KHz	Υ
1 s	Ch 1,2,3,4	500	524,288	1048	17.5 M	500 Hz	Υ
2 s	Ch 1,2,3,4	500	524,288	1048	34.9 M	250 Hz	Υ
5 s	Ch 1,2,3,4	500	524,288	1048	87.3 M	100 Hz	Υ
10 s	Ch 1,2,3,4	500	524,288	1048	174.7 M	50 Hz	Υ
20 s	Ch 1,2,3,4	500	524,288	1048	349.3 M	25 Hz	Υ

^{*} See Safety Warnings in ZEUS+ user manual

^{1 -} Total time is equal to the sweep times the number of frames

^{2 -} Actual sample rate for sweeps 50-200 µs. Effective sample rate for sweeps 500 µs and longer. The effective sample rate is based on the number of sample points stored to the data buffer memory over the selected time sweep. On all sweeps 500 µs and longer, the ADC samples at 1.5 MHz per channel regardless of sweep. The number of sample points is greater than the number of points needed to complete a screen. Only enough points to complete a screen are selected to be stored to the data buffer. This results in the effective sample rate being lower than the actual sample rate of 1.5MHz.

^{3 -} When Peak Detect is on, all samples are evaluated. The points stored to the buffer are intelligently selected to capture fast events that might be missed at slower effective sample rates. Peak Detect will capture fast changes at an effective sample rate of 1.5MHz.