

NEXTEK

Emissions Mate

**Ideal for
OBD Emissions
Applications!**



- *Accurate*
- *Fast*
- *Reliable*
- *Bright LEDs*

Inspection & Maintenance (I/M) Basic Monitoring Unit

Easy To Use!

- Audible Cue on a Monitor Change
- Bright Red/Green LEDs for Each Monitor
- Scans and Indicates if any DTCs are Present
- USB 2.0 Full Speed Interface allows Firmware Maintenance
- Low Power Sleep Mode allows In-Vehicle Long-Term Installations
- Continuously Runs Mode6 Monitors and Displays Composite Result
- Wide Temperature Range Operation for Harsh Environments
- ScanTool Interface PassThru Support through USB Connector

Emissions-Mate Benefits

- Keep ScanTool in the Shop with Emissions-Mate Deployed in Vehicle
- Continuously Scans Vehicle and provides Immediate LED Updates
- No Complicated LCD Menus to Control during a Drive Test
- Ensure Vehicle Monitors are Complete before Starting an Inspection
- Increase the Daily Number of Inspections which can be Completed

Emissions-Mate Parameters



*Emissions-Mate HandHeld Unit shows
USB 2.0 Full Speed Type-B Connector*

Basic Emissions Related Parameters

- Continuous Readiness Monitors
- Non-Continuous Readiness Monitors
- DTCs (Diagnostic Trouble Codes)
- Mode6 Pending Codes Status

Readiness Monitors : Supported and Completion Status

- Misfire
- Fuel System
- Comprehensive Component
- Catalyst
- Heated Catalyst
- Evaporative System
- Secondary Air System
- A/C System Refrigerant
- Oxygen Sensor
- Oxygen Sensor Heater
- EGR System
- Warm-Ups

Mode6 Pending Codes Status Support

- Performs Mode6 Pending Codes scan and Displays the Composite Result
- Mode6 Data Interpretation based on Vehicle OEM available with Mode6 Software Application*

* Contact NEXTEK for Availability

Additional Emissions-Mate Options

- “Ready” LED provides Custom Display based on State Mandated Requirements*
- SDK Available for Custom Software Applications to perform OBD Communications to vehicle through Emissions-Mate USB Port*

* Contact NEXTEK for Availability and your Custom Requirements

***Keep your Techs in the Shop while the Customer runs the Drive
Cycle on the Vehicle using the NEXTEK Emissions-Mate***

Emissions-Mate Technical Specifications

General

- Power Requirements: 12VDC @ 7.5mA typ (Idle - Sleep)
12VDC @ 150mA typ (OBD Active - Monitoring)*
- Enclosure: ABS Plastic : Black color
- User Interface: IMB1 Power/Status LEDs (Red/Yel/Grn)
General - Power, Ready
Continuous - Misfire, Fuel Sys, Comprehensive, DTCs, Mode6
Non-Continuous - Evap, EGR, O2 Sensor, O2 Sensor Heaters
Catalyst, Heated Catalyst, A/C System
Secondary Air, Warm-Ups
- USB Interface: v2.0 Compliant, Full Speed (12Mbits/s)
Type-B (Peripheral) Connector
Bus powered device @ 500ma peak
- Firmware Upgrade Support: Flashable program memory via USB Connector
- HandHeld Dimensions: 3.2"W x 4.8"H x 1.0"D
- Cable Length: 6'
- Weight: approx. 22 oz
- Environmental: -25 to +70 Deg C temp ambient
20% to 90% RH, Non-Condensing

* Average power reqt based upon typical monitoring profile running VPW protocol on GM

Scanning Engine/Display/Power

- Microcontroller: Microchip PIC18LF4585 @ 16MHz Fosc
- LED Drivers: TLC592x based with 16 bi-color LEDs @ 15ma constant
current drive typical per diode
- Power Supply: LM2694 based high efficiency switching regulator
@ 90% power efficiency typical

ESD/Transient Protection

- DLC Pin 16: Transorb @ 600W peak pulse - 35Vbr nom - 48V @ 12A max clamp
- DLC Pins 2,10,7,15: Varistor @ 0.1J non-repetitive surge - 65V @ 2A max clamp
- DLC Pins 6,14: Diode @ 6kV HBM ESD non-repetitive pulse
- USB D+/D-: ESD Suppressor - IEC 61000-4-2 Direct&Air Discharge
- USB Pwr/Gnd: Varistor @ 0.1J non-repetitive surge - 17V @ 1A max clamp

Vehicle Interface

- Supported OBD2 Modulations: VPW,PWM (SAE J1850)
NRZ UART (ISO 9141, KWP 2000)
CAN (ISO 11898)
- Supported OBD2 Protocols: ISO 9141-2 (ISO9141)
ISO 14230-4 (KWP2000)
ISO 15765-2 (FlowControl CAN)