



DE-864W Portable Dynamic Signal Analyzer

DESCRIPTION	FEATURES	SPECIFICATIONS	SYSTEM CONFIGURATION	SOFTWARE	MODULES / ACCESSORIES
<p>The DE-864W Portable Dynamic Signal Analyzers is a multi-functional, high-portable data acquisition system composed of a high-performance embedded computer, a 10.1-inch HD touch display, a SSD and a DAQ card.</p> <p>DE-864W has abundant channel types and interfaces, which can be flexibly connected to various types of sensors to test and analyze a variety of physical quantities such as voltage, current, stress, strain, pressure, displacement, velocity, and acceleration.</p>	<p>Compact, portable, suitable for on-site testing</p> <p>Individual 24-bit A/D converters per channel with selectable sample rate of up to 100kHz for high resolution data</p> <ul style="list-style-type: none"> Built-in 24V/4mA biasing circuit, used to acquire the output signal of IEPE acceleration sensors and microphones. Built-in bridge completion and Excitation Built-in LPF and anti-aliasing filter Support camera access, and realize synchronous analysis of data and video signal. Support external GPS/Beidou module access, and realize speed measurement, time calibration, longitude and latitude recording, trajectory drawing and so on. Built-in CAN bus port, support import DBC format file, realize CAN data storage and analysis. Built-in tachometer/counter module, used for rotational speed measurement, order tracking analysis, angle measurement and so on. Support EID and TEDS. Built-in rechargeable lithium battery and external backplane battery . 	<p>Number of input channels 8 channels/card, 8 or 16 channels (optional) + 2 Tacho channels +1 channel GPS signal module</p> <p>Input Coupling GND, Dif-DC, Sin-DC, AC, IEPE</p> <p>Input Impedance 10MΩ+10MΩ</p> <p>Input Voltage Range ±0.1V, ±1.0V, ±10.0V</p> <p>Indication Error <0.2% of F.S.</p> <p>Nonlinearity ≤0.05% of F.S.</p> <p>Noise ≤ 3μV_{RMS}</p> <p>CMR ≥ 100dB</p> <p>Strain Measurement</p> <p>Input Strain Range ±1000με, ±10000με, ±100000με</p> <p>Indication error 0.5%±3με</p> <p>Nonlinearity 0.1% of F.S.</p> <p>Zero Drift <3με/2h</p> <p>Strain gauge sensitivity coefficient 1.0 ~ 3.0 (autocorrection)</p> <p>Wire resistance correction range 0~100Ω</p> <p>Bridge Excitation</p> <p>Bridge Configuration Full, half, three-wire quarter bridge</p> <p>Bridge Completion Resistors 120Ω/350Ω(Three-wire quarter bridge) 50Ω~10000Ω(Half bridge/Full bridge)</p> <p>Bridge Voltage 2V, 5V, 10V, 24V DC Within 0.1%</p> <p>Current Max. 30mA</p> <p>LPF</p> <p>Cut-off Frequency (-3dB±1dB) 30Hz, 300Hz, 3kHz, PASS</p> <p>Flatness: <0.1dB Within 1/2 of cutoff frequency</p> <p>Stop-band Attenuation: >-18dB/Oct.</p> <p>A/D Converter 24 bits</p> <p>Freq. Response DC~50kHz (+0.5dB~-3dB)</p> <p>Max. Sampling Rate 128kHz</p> <p>Anti-aliasing filter</p> <p>Cut-off Frequency 1/2.56 of sampling rate</p> <p>Stop-band Attenuation: >-120dB/Oct.</p> <p>Flatness: ±0.05dB Within analysis frequency range</p> <p>Power Supply Built-in 6800mAh battery, over 2h of battery life (Fully charged), 40W And, external Li-battery module(97Wh)</p> <p>Dimensions 265×197×100 mm</p> <p>Weight Typ. 4500g</p> <p>Environmental Conditions</p> <p>Operating Temperature -20 to 60°C</p> <p>Operating Humidity 5 to 90 %RH @50°C</p> <p>Storage Temperature -40 to 70°C</p> <p>Storage Humidity 90% RH 48h@60°C</p> <p>Vibration Frequency cycle range: 5~55~5Hz Drive amplitude (peak): 0.19 mm Sweep frequency: ≤10c/min Duration of resonant: 20min Vibration direction: x, y, z</p>	<p>Strain Gauge Bridge Sensor Acceleration Sensor Magnetostrictive Velocity Sensor Charge Output Acceleration Sensor CAN Module GPS Module Tachometer Encoder</p> <p>DE-864W</p>	<p>DE-BSP Basic platform software</p> <p>Running on XP/Win7/Win8/Win10 operating system.</p> <p>Parameters setting, Function control, Real-time/post-acquisition analysis, data browsing, cursor readouts, scaling curve, data management and simple processing, report generation, long-term continuous data recording, etc..</p>	<p>DE-864W DAQ card</p> <p>8 input channels/Card, 8/16 channels(optional). Support IEPE, Dif-DC, Sin-DC, AC, GND Inputs. Input voltage range is up to ±10.0V, input strain range is up to ±10000με. Selectable continuous sampling rates from 10Hz to 100KHz . 24-bit A/D converter.</p> <p>DE-864W Host chassis</p> <p>Built-in high-performance embedded computer with dual-core processor, 2G memory, 9.7-inch HD touch display and 128G SSD. Windows OS. Built-in two 8-channel DAQ card slots, 2-channel CAN bus communication interface, 2-channel tachometer/counter channel, and 1-channel GPS signal module interface. Built-in 6800mAh battery. 265×195×80 mm, 3 kg.</p> <p>DE-864W-TC tachometer/counter module</p> <p>Number of channel: 2 input channels Rotation rate measurement Range: 30 ~ 300000 rpm; Accuracy: < 0.05%±1r; Counter measurement Operating mode: support positive/reverse, pulse accumulative count, pulse count per unit time Frequency multiplication mode: 1/2/4 times Reset mode of pulse number: manual reset Timing range: 1 ~ 60000ms Power supply: 5VDC/50mA</p> <p>GPS01 GPS Module(optional)</p> <p>GPS update rate: 1Hz Position accuracy: 3m Velocity measurement accuracy: 0.1m/s PPS accuracy: 20ns First positioning time (hot start): 1s</p> <p>DE-864W-CAN CAN Module</p> <p>Number of channel: 2 input channels Protocol: CAN2.0B Baud rate: 4800bps~1Mbps Communication mode: duplex CAN bus for sending and receiving Support dbc file import. Supports standard and extended frame formats.</p> <p>DT5857-8 Charge conditioner(optional)</p> <p>Max. input charge: 10³pC Input Impedance: >10¹¹Ω Amplifier output sensitivity: 0.1mV/pC or 10mV/pC Indication error: <1% Noise: <10×10⁻³pC Max. bandwidth: 0.3Hz ~ 300KHz(+0.5dB ~ -3dB) Distortion: <0.5% (Frequency < 30kHz) Dimensions: 50×20×80mm</p> <p>DT3811-8 Current loop conditioner(optional)</p> <p>Number of channel: 1 input channel Suitable for 2-wire or 3-wire 4~20mA sensor Power supply: 24V_{DC} Dimensions: 30×20×80mm</p> <p>DT3814-8 Thermistor conditioner(optional)</p> <p>Number of channel: 1 input channel. Meas. Range: -200°C ~ 850°C Accuracy: 0.5%±0.5°C I_{exc}: 1mA±2μA Suitable for Pt10, Pt100, Pt1000 sensors Dimensions: 30×20×80mm(Single channel)</p>

DE-864W-P External Li-battery module
External lithium battery pack.
Support hot-swap.
97Wh
Input/Output 18V 2A

