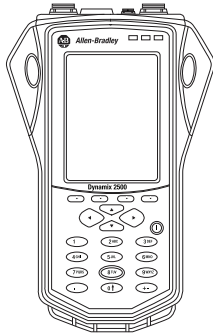


Dynamix 2500 Portable Data Collector



The Dynamix™ 2500 data collector is a real-time, multi-channel fast Fourier transformer (FFT) analyzer and data collector for predictive maintenance and machinery vibration diagnostics. It can measure, process, display, and store a wide range of analysis functions. It can operate as a standalone instrument or you can download your measurements to your software application for program analysis.

Table 1 - Technical Specifications - Dynamix 2500 Portable Data Collector

Attribute	1441-DYN25
Input channels	Four
Input sources	<ul style="list-style-type: none"> Acceleration, velocity, and displacement from hand-held or installed sensors or monitoring systems AC/DC sensors Pressure sensors Temperature sensors Keyboard entry measurements read from indicators or installed instruments entered in engineering units Universal tachometer input accepts pulse inputs in the range $\pm 25V$ Visual inspections added to measurement as coded notes or typed-in text notes
Tachometer input parameters	<ul style="list-style-type: none"> TTL/analog programmable to $\pm 25V$ RPM range 1...99,999 Dynamic range > 90 dB (24-bit ADC sigma-delta)
Input overvoltage protection	<ul style="list-style-type: none"> $\pm 50V$ AC, peak DC $\pm 50V$ DC
Amplitude accuracy	$\pm 5\%$
Resolution	Programmable 100, 200, 400, 800, 1600, 3200, 6400, or 25600 lines
Measurement windows	<ul style="list-style-type: none"> Hanning Hamming Flat top Rectangular
Multi-point automation	Up to 12 measurements can be linked for one-button automated data collection for each measurement location

Table 1 - Technical Specifications - Dynamix 2500 Portable Data Collector

Attribute	1441-DYN25
Preprocessing	gSE and ESP enveloping (demodulator) with four selectable input filters for enhanced bearing and gear mesh fault detection
Input filters, gSE	<ul style="list-style-type: none"> 100 Hz 200 Hz 500 Hz 1 KHz 2 KHz 5 KHz
Input filters, ESP	<ul style="list-style-type: none"> 0.6...1.25 KHz 1.25...2.5 KHz 2.5...5 KHz 5...10 KHz 10...20 KHz
Nonroute frequency range	2 Hz...80 KHz
Offroute frequency range	0 Hz...80 KHz (ICP coupled measurements limited to 0.16 Hz...80 KHz) High pass: OFF (~0 Hz), 0.18 Hz, 0.36 Hz, 2 Hz, 2.67 Hz, 5.3 Hz, 10 Hz, 23.8 Hz, and 70 Hz Low pass: 1 Hz...80 KHz
Low-frequency cutoff	0.18...70 Hz
Averaging	Programmable from 1...4096 Spectral, synchronous time, peak hold, and continuous
Cursor	<ul style="list-style-type: none"> Fixed and cursor lock Single, harmonic, and peak pick
Trigger modes	<ul style="list-style-type: none"> Trigger: External or Laser Tach Trigger Level: Fixed or Automatic Ext Trig Slope: Amplitude and Slope
Data Displays	Four-channel spectrum, four-channel time, phase table, orbit, process, cross channel phase, dual spectrum, time plots, and tri-axial plots <ul style="list-style-type: none"> Up to 12 bands (fixed or order base) downloadable from host software User selection can show or hide band alarms User selection can show or hide grid
System operating system	Microsoft Windows CE
Processors	Microprocessor Marvell Xscale PXA320 at 806 MHz DSP processor Motorola DSP56311
Communication	USB with Microsoft ActiveSync
Internal memory	Internal RAM 128 MB Application and user data 64 MB
Memory card	Secure digital (SDHC) card up to 16 GB
Battery	Rechargeable lithium ion, cat. no. 1441-PEN25-BAT
Weight, approx.	715 g (1.52 lb)
Dimensions, approx.	186 x 93 mm (7.32 x 3.66 in) narrowest point 186 x 134 mm (7.32 x 5.28 in) widest point
Casing	<ul style="list-style-type: none"> 80% High Impact ABS and 20% polycarbonate plastic Hand strap fixing either side of unit

Table 1 - Technical Specifications - Dynamix 2500 Portable Data Collector

Attribute	1441-DYN25
Display	<ul style="list-style-type: none"> LCD, backlit color 1/4 VGA (240 x 320) 58 x 72 mm (2.28 x x 2.83 in) viewable
Input connectors	<ul style="list-style-type: none"> Connector A and Connector B are 7-pin LEMO connectors Trigger input is a 7-pin Fischer connector Laser tachometer DC power-in is on POWER/USB/TRIGGER input connector. This connector cannot be used in hazardous locations.
North American temperature code	T4 A
IEC temperature code	T4

Table 2 - Environmental Specifications - Dynamix 2500 Portable Data Collector

Attribute	1441-DYN25
Temperature, operating	-10...50 °C (14...122 °F)
Temperature, storage	-20...60 °C (-4...140 °F)
Relative humidity	0...95% noncondensing
Vibration	2 g @ 10...500 Hz
Drop	2 m (to Mil-Std 810)
Sealing	IP65 (dust and waterproof)
Emissions	Group 1, Class A

Table 3 - Certifications - Dynamix 2500 Portable Data Collector

Certification ⁽¹⁾	1441-DYN25
cCSAus	CSA Certified Process Control Equipment for Class I, Division 2 Group A,B,C,D Hazardous Locations. See CSA file LR236028.
CE	European Union 2004/108/IEC EMC Directive, compliant with: <ul style="list-style-type: none"> EN 61000-6-2; Industrial Immunity EN 61000-6-4; Industrial Emissions
C-Tick	Australian Radiocommunications Act, compliant with: AS/NZS CISPR 11; Industrial Emissions

(1) When marked. See the Product Certification link at <http://www.ab.com> for Declarations of Conformity, Certificates, and other certification details.



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Dynamix 2500 Accessories

The portable data collector is available as a kit (catalog number 1441-DYN25-2C). The kit includes the data collector and the following accessories.

Table 4 - Accessories Included in a Dynamix 2500 Kit

Accessory	Cat. No.
Operating system and information Cd	1441-DYN25-CD
Global power supply	1441-DYN25-PS
Battery	1441-PEN25-BAT
Transit case	1441-PEN25-CASE-T
Communication cable USB power splitter	1441-PEN25-COMS-US
Hand strap	1441-PEN25-HS
Rubber bump sleeve	1441-PEN25-RBS

Individual accessories include these items.

Table 5 - Individual Dynamix 2500 Accessories

Accessory	Cat. No.
Dust cap set for inputs	1441-DYN25-CAP
2-channel adapter cable	1441-DYN25-CBL2CH
Headset adapter cable	1441-DYN25-CBLHS
Operating system and information Cd	1441-DYN25-CD
4-channel extension module	1441-DYN25-M4CH
2-plane balancing extension module	1441-DYN25-MBAL
Bump test extension module	1441-DYN25-MBMP
Frequency response extension module	1441-DYN25-MFRF
Time recorder extension module	1441-DYN25-MREC
Run up/coast down extension module	1441-DYN25-MRUC
Global power supply	1441-DYN25-PS
Spare battery	1441-PEN25-BAT
Transit case	1441-PEN25-CASE-T
Communication cable USB power splitter	1441-PEN25-COMS-US
Hand strap	1441-PEN25-HS
Neck strap	1441-PEN25-NS
Rubber bump sleeve	1441-PEN25-RBS
100 mV per G accelerometer kit	1443-KIT-DATACTRL0