

# impaq Plus 四通道頻譜分析儀

## Portable 4 channel dynamic signal analyzer

堅固耐用的攜帶式 4 通道頻譜分析儀，具備 IP 65 工業防護等級，適合在惡劣環境中進行量測。配備 10.1 吋大尺寸多點觸控彩色顯示幕，24 位元信號擷取 DAQ，40 kHz 的最大量測頻寬。涵蓋所有振動與聲學的量測，也支援部分超音波的量測頻帶。

### 軟體模組



頻譜分析  
FFT spectrum ana



八音度頻率分析  
Octave Spectrum analysis



階頻追蹤分析  
Order Tracking analysis



錄製原始訊號及回播放分析  
Data recorder and playback



線上轉子動平衡分析  
Rotor Balancing



雙電池提供8-10小時的連續操作應用

### 硬體規格

#### Hardware Feature

Operating system  
Input channels  
Connector  
  
Channel coupling  
Tacho input  
CPU  
Internal memory  
Battery  
Interface  
LCD display  
Operating temperature  
Product approvals

Drop test  
Vibration test  
Sealing / Ruggedness  
Housing material  
Weight  
Size  
Input signal range  
A/D converter  
Frequency range

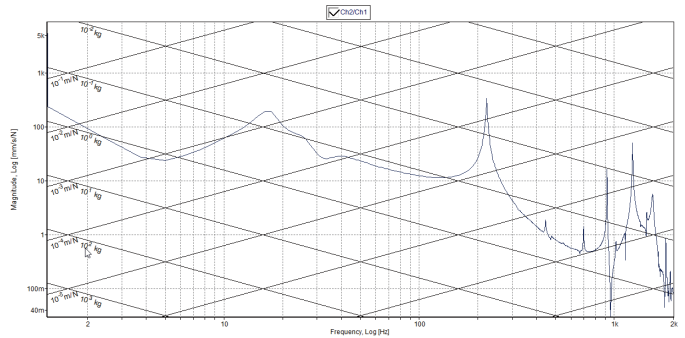
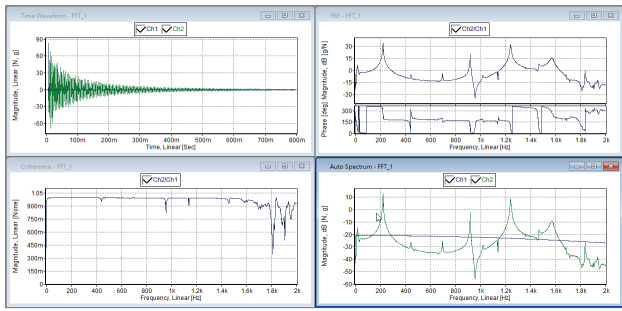
#### Technical Specifications

Windows 10 IoT enterprise  
4 analog channels and 1 tacho channel  
Channel 1 ~ channel 4: BNC. Tri-axial: Fischer Core Series 103\*, 6 pins  
Tacho input: Fischer Core Series 103\*, 7 pins. USB: USB 3.1, Type-A connector  
AC, DC, IEPE  
TTL signal, with built-in power supply  
Intel Atom® Processor N4200  
256G SSD  
14.4V, 2270mAh, 32.7W\* (x2, swappable)  
USB 3.1 type A connector x1  
1280x800 10.1" multi-touch color screen  
-10 deg C to + 50 deg C  
CE, RoHs, REACH, China RoHs, Regulatory Compliance Mark (RCM), UKCA, FCC, KC  
1.2 meters - MIL-STD 810H  
MIL STD 810 transportation  
EN60529 IP65  
Dual material mold injection  
1.9 kg with dual batteries, 1.72 kg with single battery  
300 x 195 x 50 mm  
± 5Volt, ± 20Volt  
24-bit sigma-delta A/D converter  
0 Hz-40 kHz (102.4 kHz Max sampling rate)



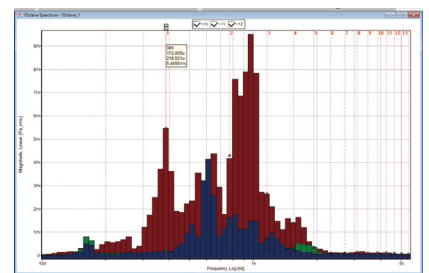
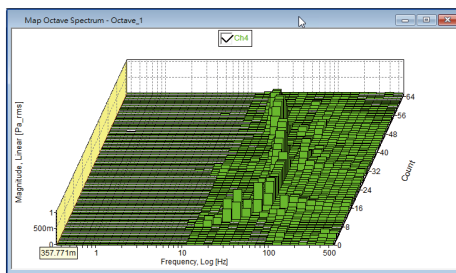
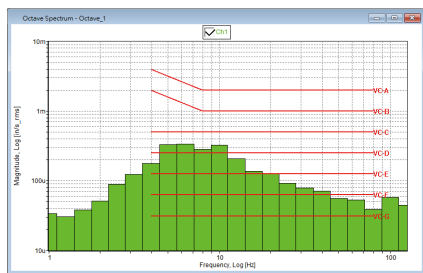
### 頻譜分析 FFT spectrum ana

14 種振動噪音量測分析功能：實驗模態測試 (Modal)、操作模態振型測試 (ODS)、包絡頻譜分析 (Envelope)、瀑布圖 (3D Waterfall)、強度圖 (Intensity)，及起停機或升降速之變轉速，對變負載或振動進行測試分析。



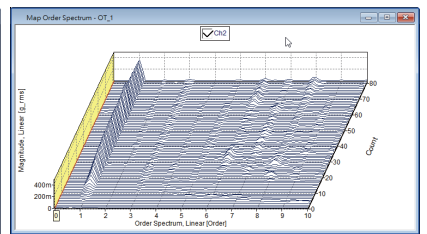
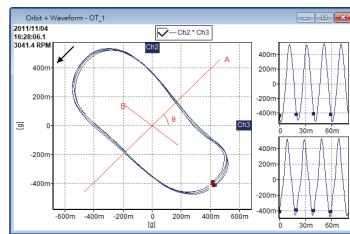
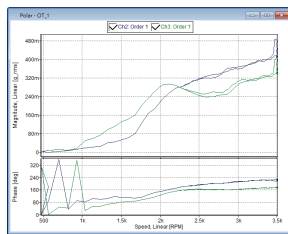
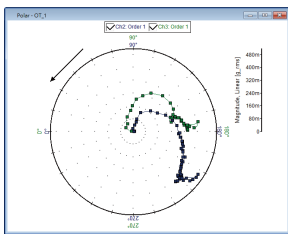
### 八音度頻率分析 Octave Spectrum analysis

使用平行時域數位濾波技術，可同時顯示 1/1 倍頻、1/3 倍頻及 1/12 倍頻頻譜。音頻分析內建 IEC 61260 & IEC 61672 標準，及內建 ISO 6954, ISO8041, ISO2631 特殊權重的振動規範，亦可應用於樓板振動強度之 VC 曲線的量測。



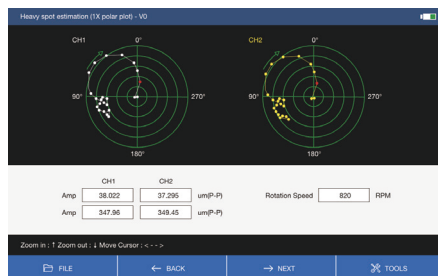
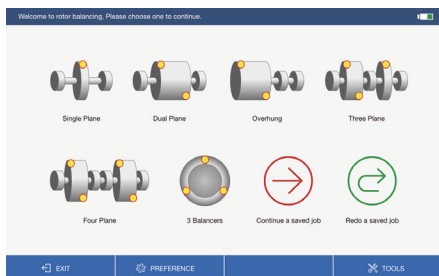
### 階頻追蹤分析 Order Tracking analysis

準確測量和分析轉機的啟動與停機過程中之轉速階次頻譜、階次變化趨勢、濾波或未濾波軌跡 (Orbit)、氣隙變化以及軸中心線 (Center Line)。典型應用為車輛的 NVH (噪音、振動、聲振粗糙度) 測試，及渦輪機轉子的振動問題分析。



### 線上轉子動平衡分析 Rotor Balancing

旋轉機器設備的現場轉子動平衡校正，提供單平面、雙平面、懸臂雙平面、3 平面、4 平面和 3 配重塊平衡法。附加功能：1X 降速測試、雙平面轉換三平面 (靜+偶不平衡)、不等半徑計算、分量計算、鑽孔深度計算、振動歷史資料、動平衡歷史資料。



	Mass(gram)	Degree
D1: P1 Diameter 200 mm	Plane 1 +248.6m	82.0°
D1: P1 Diameter 300 mm	Plane 2 +142m	62.0°
D1: P1 Diameter 400 mm	Plane 3 +436.7m	250.8°

