# SCOUT220-IS and SCOUT240-IS Portable Data Collectors

# Datasheet

Bently Nevada Machinery Condition Monitoring

109M0226 Rev. Y







# **Description**

SCOUT220IS and SCOUT240IS are intrinsically safe portable data analyzer solutions designed to monitor machinery conditions in hazardous environments. Both are rated ATEX Zone 1 / Zone 21 (for gases and non-conductive dust) and CSA Class 1 / Div 1. These small form-factor, rugged devices take vibration recordings and upload the collected data for detailed analysis in System 1.

This is a two-part solution. The SCOUT data acquisition module uses Bluetooth to communicate with a wireless, industrial handheld device running the SI Collector app.

Vibration recordings are viewed and stored on the **handheld device**. We offer these devices with hazardous area ratings up to Zone 1/21 & Div 1. The handheld runs the Android OS, so you can also use it like any smartphone or tablet to take pictures and video, send text messages, check email, make phone calls, track your location, create SOS alerts, and run other enterprise apps.

The high performance **data acquisition module** provides long battery life, yet is light & rugged. It hangs out-of-the-way on a shoulder strap, allowing you to focus on your job and move safely between machines. The SCOUT220IS can sample two sensor channels simultaneously, while the SCOUT240IS supports up to four channels. Both also support tachometer or Keyphasor triggering. These data acquisition modules provides up to ten hours of continuous use, while supporting an  $F_{\text{max}}$  up to 80 kHz and 12,800 lines of spectral resolution. Both models are rated IECEx/ATEX Zone 0 / 20 (for gases and non-conductive dust) and CSA Class 1 / Div 1.

The **System 1 software**, paired with SCOUT220IS and SCOUT240IS, enables you to track all of your machinery using a single enterprise monitoring system. Use System 1 to prepare routes, analyze data, detect long-term trends, and set and detect alarms. Then transfer the routes between System 1 and your SCOUT device using WiFi, file transfer, cellular network, or a USB cable.



#### **Hardware Features**

- Battery life of 10 hours allows the data collector to run all day.
- Five year warranty.
- Rugged, water, and dust resistant (IP-65), drop-tested, with intrinsically safe variants.
- Easy to carry: lightweight handheld unit, shoulder strap for data collector, keepers for sensors.
- Safety breakaways on both shoulder strap and sensor cables.
- Upgradable industrial handheld smartphone or tablet.
- Handheld Push-to-Talk(PTT) button is configured to start measurements (where available).
- Up to four channel simultaneous recordings (including on-route).
- SCOUT240 supports Triaxial sensors.
- Up to 12,800 lines of spectral resolution, 80 kHz F<sub>max</sub>.
- Supports accelerometer, velocity, displacement, and voltage-output sensors of AC and DC coupling types.

#### **Software Features**

- Seamless on-and off-route data collection.
- Route overview & easy route navigation.
- Fast sensor settling and data collection.
- Patented 6Pack time-saving measurement type.
- Synchronous sampling, peak demod, and bump test.
- Coast-down, run-up, and interval capture support.
- Custom note and numeric data entry.
- Rotor Balancing, dual plane, reports transferred to System 1.
- Data quality warnings and easy-tounderstand alarm annunciation.
- Supports operator driven reliability (ODR).
- Cross Channel Phase measurement & reports.
- Set machine speed from spectral peak.



The SCOUT portable connects via Bluetooth to the handheld, which you can then sync with System 1.



# **Data Collector Specifications**

#### Sensors

Sensor input Simultaneous	SCOUT220IS : 2 channels.		
sampling	SCOUT240IS: 4 channels.		
Compatible sensor types	Accelerometer, velocity, displacement, and voltage.		
AC coupled range	16 V peak-peak. Allows for ± 8 V sensor output swing (± 80 g).		
DC coupled ranges	0 to 20 V, -10 to 10 V, -20 to 0 V		
Connectors	2 x LEMO connectors for CH1 & CH2+ 1 X LEMO connector for Tach/Keyphasor SCOUT240IS includes a CH 2.4 breakout cable.		
Analog to digital conversion	24-bit ADC		
Sensor excitation	0 mA or 2.2 mA (configurable), 24 V maximum		
current	2.2 mA powers IEPE/ICP-type sensors		
Sensor detection	Measures sensor bias voltage. Warns if short circuit or not connected.		

### Tachometer

	Battery-powered, handheld laser sensor.			
Optional IS Zone 0 rated laser Tach	Triggers when beam on reflective tape range 10 cm to 2 m.			
	Speed 6 to 250 krpm.			
Optional	Laser sensor powered by Portable Data Collectors.			
Zone 2 rated laser Tach	Triggers when beam on reflective tape range 10 cm to 2 m. Speed 6 to 250 krpm.			
Other sensor types supported	Contact, TTL Pulse, Keyphasor			
Power supply to sensor	5 V, 40 mA Rated for Zone 2, 22 and Division 2 only.			
Input Impedance & max values	100 KΩ ± 28 V max			
Waveform display	± 20 V range			
Threshold	± 20 V range ± 0.4 V accuracy			
Auto- threshold mode	Signal ≥ 3 V pk-pk Machine speed ≥ 60 rpm (1 Hz) Settles within < 15 s			
Hysteresis	0.2 V to 2.5 V user configurable			
Speed range	Minimum: 3 rpm (0.05 Hz) Maximum: 1,200,000 rpm (20 kHz)			
Signal pulse width	10 µs minimum 2% duty cycle (for auto-threshold)			
Accuracy	± (0.1% + 1 cpm) for speeds up to 5 kHz (300 kcpm). ± (0.3%) for speeds above 5 kHz (300 kcpm).			



Parameter Indication		Fmin possible	e O to F <sub>max.</sub>	0 to F <sub>max.</sub> Instrument zeroes all spectral		
Dynamic signal range	> 95 dB typical at 400 line resolution	range		lines below F <sub>min</sub> .		
Harmonic distortion	Less than -70 dB typical. Other distortions and noise	Resolution (Spectral lines)		400; 800; 1,600; 3,200; 6,400; 12,800 lines		
	are lower.	iii 163)	Channels	220 max lines	240 max lines	
Units	g or m/s <sup>2</sup> in/s or mm/s		1	6,400	12,800	
Offics	mil or mm or µm peak, or peak-peak, or RMS		2 2 2 4	3,200	6,400	
Magnitude &	Overall value: RMS, derived pk,		3 or 4	N/A	3,200	
cursors	derived pk-pk Dual cursors Digital readouts on chart	Frequency scale		Hz, CPM, Orders. Linear scale with zooming.		
Base accuracy	For AC signal: ± 1% of readings For DC level: ± 1% of full scale (1% is approximately 0.1 dB)	Amplitude scale	displacer	ion, velocit nent. to scaling.	·y,	
High frequency		Window shapes	Hanning,	Hanning, Rectangular		
attenuation	Attenuation tolerances are in addition to base accuracy.	Overlap	87.5) % De	(0, 12.5, 25, 37.5, 50, 62.5, 75, 87.5) % Dependent on Fmax		
AC coupling attenuation	≤ 0.1 dB 10 Hz to < 100 Hz ≤ 3 dB 1 Hz to < 10Hz			ber of lines		
≤ 0.1 dB 10 Hz to < 100 Hz ≤ 1.5 dB 1 Hz to < 10 Hz.		Number of averages		s, 32, 64, 128 sampling nally		
Attenuation due to Integration Integration    Values apply to single integration (acceleration to velocity). Double the values for double integration	Averaging types	Linear, ex	oonential,	peak hold		
	double integration (acceleration to displacement).	Demodulation bandwidths	125 Hz to 1 kHz to 20	23 bandwidth options from 125 Hz to 1,250 Hz and up to 16 kHz to 20 kHz.		
Spectrum Display				nod: 500Hz <sup>.</sup> 40kHz, 5-40	•	
Fmax ranges	25; 50; 100; 125; 150; 200; 300; 400; 500; 600; 800; 1,000; 1,200; 1,600; 2,000; 2,500; 3,000; 4,000; 5,000; 6,000; 8,000; 10,000; 15,000; 20,000; 30,000;	6Pack	channel) Up to 20 k channels	Up to 40 kHz & 3,200 lines (1 channel). Up to 20 kHz & 1,600 lines (2-3 channels).		
10,000; 15,000; 20,000; 30,000; 40,000; 60,000; 80,000 Hz or equivalen. CPM values or orders-based from 1X to 999X.			each of lo	Spectrum and waveform for each of low-frequency, high-frequency, demodulation		



### **Waveform Display**

Number of samples	1,024; 2,048; 4,096; 8,192; 16,384; 32,768				
	Channels	220 max samples	240 max samples		
	1	16,384	32,768		
	2	8,192	16,384		

Time scale 10 ms to 256 seconds or orders based from 1 to 999 revs

3 or 4

N/A

8,192

# **Balancing**

Planes	2 planes, 2 sensors
Speed Range	3 to 12,000 RPM
Measurement Type	Acceleration, Velocity, Displacement
Weight modes	Angle 0° to 360° Fixed Positions
Remove Trial Weights	Yes/No Automatic recalculation
Storage	Balance jobs stored on handheld and transferable to System 1

# Communication

Bluetooth	BT 4.0 Classic

# **Battery and Charger**

Battery type	Custom Lithium Ion pack, 7.4 V, 3920 mAh.		
	Not user accessible but factory replaceable.		
Operating Time	10 hours typical on-route data collection		

Charger type	Internal charging, automatic control.		
	External power pack 12 V DC, 3 A output.		
Charge rate	2 A nominal 3 hours for complete charge.		

#### Mechanical

Size	5.1" W x 5.1" L x 1.4" H
	(130 mm W x 130 mm L x 35 mm H
Weight	1.5 lb ≈ 680g

### **Environmental Limits**

Operating temperature	-4°F to 140°F (-20 to 60°C) 122°F (50°C) max when used in Ex hazardous areas
Ambient temperature for charging battery	32°F to 77°F (0°C to 25°C)
Storage temperature & humidity	-4°F to 140°F (-20°C to 60°C), 95%relative humidity If storage exceeds one month: up to 95°F (35°C), 85% relative humidity.
Ruggedness drop & sealing	Drop spec MIL-STD-810F-516.5-IV 26 drops at 4' (1.2 m) onto concrete

# **S1 Collector App**

Operating System	Android 5.1 to 12
Languages	Chinese, English, Finnish, German, Japanese, Russian, Spanish, Turkish



# **Handheld Specifications Summary**



A handheld devices is not included in the SCOUT kit. To order a device, add it as an accessory item, or obtain an appropriately rated device directly from the supplier.



For self-supplied handheld devices, we cannot guarantee SCOUT200 compatibility with every make/model or version of Android. Contact BN TechSupport for a list of tested models, or to request a test.

	Smart Ex 02 DZ2	Smart Ex 02 DZ1	Tab Ex DZ2	Tab Ex DZ1	IS930.1	
Device Image	The state of the s		- CLUMP - CLUM			
Display & Touch		glass, glove vet mode	8" 1920 x 1200, 480 nit, glove touch & wet mode		8" 1920 x 1200, glove touch	
Wireless & GPS	4G/LTE dual SIM, WiFi 2.4 & 5 GHz, BT 4.2, NFC, GPS		WiFi 2.4 & 5 GHz, BT 5.0, NFC, GPS		WiFi 2.4 & 5 GHz, BT 5, NFC, GPS	
Cameras	12 MP rear, 5 MP front		13 MP rear, 5 MP front		13 MP rear, 5 MP front	
os	Android 9		Android 11 or later		Android 10	
CPU	Qualcomm Snapdragon 450		Exynos 9810, 2.7 GHz, Octa-core		Qualcomm Snapdragon SDM660 Octa-Core	
Memory	3 GB RAM, 32 GB ROM up to 128 GB microSD		4 GB RAM, 48 GB internal, up to 1 TB microSD		64 GB internal memory, up to 128 GB microSD	
Battery	Replaceable Li-lon 4400 mAh		Li-lon 3.8V, 5050 mAh, up to 11 hrs		Li-lon 8400 mAh	
Size & Weight	163 x 82 x 380	•	214 x 127 x 10 mm, 610 g	263 x 162 x 26 mm, 1100 g	237 x 156 x 22 mm, 890 g	
Ruggedness	IP68, MIL- -20 to	STD-810G, 60°C	IP68, 1.2m drop, -20°C to +55°C	IP65, -20°C to +50°C	IP68, -20 to +60°C	
Warranty	3 у є	ears	3 у е	ears	3 years	



	Smart Ex 02 DZ2	Smart Ex 02 DZ1	Tab Ex DZ2	Tab Ex DZ1	18930.1
IECEX ATEX	Zone 2/22 Ex ic IIC T4 Gc IP64 Ex ic IIIC T120°C Dc	Zone 1/21 Ex ib IIC T4 Gb IP64 Ex ib IIIC T120°C Db	Zone 2/22 Ex ic IIC T5 Gc Ex ic IIIC T85°C Dc	Zone 1/21 Ex ia IIC T6 Gb Ex ia IIIC T80°C Db	Zone 1/21, Ex ib IIC T4 Gb, Ex ib IIIC T135°C Db
CSA	Class I,II,III Div 2, Groups A G, T4	Class I,II,III Div 1, Groups A G, T4	Class I Div 2, Groups A D, T5	Class I,II Div 1, Groups A G, T5	Class I,II,III Div 1, Groups AG, T4
Complete Specs, Accessories	www.ecom-ex.com		www.ecoi	m-ex.com	www.isafe-mobile.com
SCOUT200 Compatibility			These handhe models, so the support USB Te prevents them USB Direct com System 1.  Available com WiFi, File mode comms.  To use USB Tet WWAN version Pepperl & Fuch	by do not ethering. This from using nms with ms methods: , Remote hering, order direct from	



Numerous accessories are available for these handhelds, direct from each handheld manufacturer (e.g. charging stations, belt-clips for the smartphones, and cases for the tablets). You can find the accessories pages on the handheld manufacturers websites.



# **Cyber Security**

The SCOUT220IS and SCOUT240IS solutions include an industrial handheld device that runs the Android operating system and uses USB, cellular, Bluetooth and Wi-Fi for communication. These solutions have features that reduce but do not eliminate cyber security risks.

We strongly recommend implementing additional cyber security protections such as:

- Controlling user access
- Scanning for viruses
- Applying timely updates
- Using mobile device management software



The recommended measures are at your discretion and responsibility. Some residual risk may remain.

For details, see the SCOUT200\_Series Cyber Security Hardening Guideline (document 131M1304) at BNTechSupport.com.

### **App Updates**

The Bently Nevada development team periodically updates the S1 Collector App with new features and enhancements. Built into the app is the new firmware to also automatically update the SCOUT200 data collector. These updates are free to all SCOUT200 owners who have a current Maintenance and Support agreement (M&S) for their System 1 software.

The updates can be obtained from either of these locations:

- Flexnet Licensing Portal > System 1 > System 1 Collector App.
- 2. Google Playstore > Search "S1 Collector"



# Compliance and Certifications



This section applies only to the Data Collector, not the handheld device.

This device complies with Industry Canada license-exempt RSS standard(s) and complies with part 15 of the FCC Rules, Class A device. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.



Changes or modifications not expressly approved by Bently Nevada could void the user's authority to operate the equipment.



This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.



For the detailed listing of country and product specific approvals, refer to the *Approvals Quick Reference Guide* (108M1756) available from Bently.com.

RED/EMC  EN 61000-6-2 EN 61000-6-4 EN 300 328 EN 301 489-1 EN 301 489-17 EN 61326-1  2014/53/EU 2014/30/EU   ATEX/IECEX   II 1 (1) GD II 3 (3) GD  Ex ia [ia] IIC T4 Ga Ex ic [ic] IIC T4 Gc Ex ia [ia Ga] IIIB T135°C Da Ex ic [ic Gc] IIIB T135°C Da Ex ic [ic Gc] IIIB T135°C Dc   CSA/NRTL/C  Class I Division 1 Groups ABCD Class I Division 2 Groups ABCD Class II Division 2 Groups FG Class I Zone 0, Ex/AEx ia [ia] IIC T4 Ga Class I Zone 0, Ex/AEx ia [ia] IIC T4 Ga Class I Zone 2, Ex/AEx ia [ia Ga] IIIB T135°C Da Zone 22, Ex/AEx ia [ia Ga] IIIB T135°C Da Zone 22, Ex/AEx ic [ic Gc] IIIB T135°C Dc  T4 @ Ta = -20°C to +50°C  The installation must comply with the SCOUT200 Hazardous Location Installation Control Drawing (document IIIM0029).  ROHS  2011/65/EU		
Ex ia [ia] IIC T4 Ga Ex ic [ic] IIC T4 Gc Ex ia [ia Ga] IIIB T135°C Da Ex ic [ic Gc] IIIB T135°C Dc  CSA/NRTL/C  Class I Division 1 Groups ABCD Class I Division 2 Groups ABCD Class II Division 2 Groups FG Class II Division 2 Groups FG Class I Zone 0, Ex/AEx ia [ia] IIC T4 Ga Class I Zone 2, Ex/AEx ic [ic] IIC T4 Gc Zone 20, Ex/AEx ia [ia Ga] IIIB T135°C Da Zone 22, Ex/AEx ic [ic Gc] IIIB T135°C Dc  T4 @ Ta = -20°C to +50°C  The installation must comply with the SCOUT200 Hazardous Location Installation Control Drawing (document 111M0029).	RED/EMC	EN 61000-6-4 EN 300 328 EN 301 489-1 EN 301 489-17 EN 61326-1 2014/53/EU
Class I Division 2 Groups ABCD Class II Division 1 Groups FG Class II Division 2 Groups FG Class I Zone 0, Ex/AEx ia [ia] IIC T4 Ga Class I Zone 2, Ex/AEx ic [ic] IIC T4 Gc Zone 20, Ex/AEx ia [ia Ga] IIIB T135°C Da Zone 22, Ex/AEx ic [ic Gc] IIIB T135°C Dc T4 @ Ta = -20°C to +50°C The installation must comply with the SCOUT200 Hazardous Location Installation Control Drawing (document 111M0029).	ATEX/IECEX	Ex ia [ia] IIC T4 Ga Ex ic [ic] IIC T4 Gc Ex ia [ia Ga] IIIB T135°C Da
ROHS 2011/65/EU	CSA/NRTL/C	Class   Division 2 Groups ABCD Class   Division 1 Groups FG Class   Division 2 Groups FG Class   Zone 0, Ex/AEx ia [ia]   CT4 Ga Class   Zone 2, Ex/AEx ia [ia]   CT4 Gc Zone 20, Ex/AEx ia [ia Ga]   CT4 Gc Zone 20, Ex/AEx ia [ia Ga]   CT4 GC Zone 22, Ex/AEx ia [ia Ga]   CT4 GC Zone
	ROHS	2011/65/EU

The above ratings include the following areas:

- Intrinsically safe Zone 0, 20 and Division 1
- Lower level protection of Zone 2, 22 and Division 2

Only the following restricted sensor types are certified for intrinsically safe use:

SCOUT-powered sensors such as ICP/IEPE accelerometers



 Self-powered tachometers such as battery-powered handheld laser tachometers

You can use other types of sensors such as buffered outputs from instrumentation racks only in lower rated Zone 2, Division 2 areas. Refer to SCOUT200 Hazardous Location Installation Control Drawing (document 111M0029) for details.



For the optional dust certification (Class II Groups F and G, and Zones 20 and 22), special dust-certified sensors are required. If this is required, inform your Bently Nevada sales professional so that the correct sensor can be substituted.



The overall hazardous system rating is defined by the minimum rating of the data collector, industrial handheld, and accessories.



# **Ordering Information**



For the detailed listing of country and product specific approvals, refer to the *Approvals Quick Reference Guide* (108M1756) available from Bently.com.

#### SCOUT220IS-AA

#### **A: Data Collector Approval Options**

05 Multi Approvals (CSA, IECEx, ATEX)



The SCOUT220-IS basic kit does NOT include a handheld device, nor a System 1 software license. They are ordered separately under Optional Accessories below.

Part Number	Description	Qty
	S1 Collector app	1
	SCOUT220IS Data Collector	1
108M4044	AC power adapter	1
PLUS0230	Category A power plug (USA / Canada)	1
PLSA0241	Category D power plug (South Africa / India)	1
PLAU0228	Category M power plug (Australia / New Zealand / China)	1
PLHK0245	Category G power plug (Hong Kong / UK)	1
PLEU0229	Category C Power plug (Europe)	1
AM3100T2- Z0 or 200350*	Accelerometer, top exit	1

Part Number	Description	Qty
AS3100S2- Z0 or 200350*	Accelerometer, side exit	1
151M8244- 01	Accelerometer cable, coiled, safety breakaway	2
113M5585	Accelerometer magnetic base	2
109M2385- 012	BNC to silver-LEMO cable. Connects rack buffered outputs to CH1/CH2 inputs.	2
110M8172- 012	BNC to black-LEMO cable. Connects rack buffered Keyphasor to Tach input.	1
109M2384- 01	Anti-static neck strap with Sensor Keeper	1
112M4551	Hard carrying case	1
109M1269	SCOUT200 Series User Guide	1
109M1270- 01	SCOUT200 Series Quick Start Guide	1
Bently Manuals DVD	Contains the SCOUT220IS and SCOUT240IS Product Datasheet (109M0226), the SCOUT200 Series Quick Start Guide (109M1270), and the SCOUT200 Series User Guide (document 109M1269).	1

<sup>\*</sup> Kit items with multiple part numbers listed have limited regional availability due to certification requirements.



Metrology certification can be requested when an order is placed, however this service is charged. Standard test data can be requested for free, but is not evidence of calibration.

To request a periodic metrology calibration, contact **Bently Nevada Tech Suppport**.



#### SCOUT240IS-AA

#### **A: Data Collector Approval Options**

05 Multi Approvals (CSA, IECEx, ATEX)



The SCOUT240IS basic kit does NOT include a handheld device, nor a System 1 software license. They are ordered separately under Optional Accessories below.

Part Number	Description	Qty
	S1 Collector app	1
	SCOUT240IS Data Collector	1
108M4044	AC power adapter	1
PLUS0230	Category A power plug (USA / Canada)	1
PLSA0241	Category D power plug (South Africa / India)	1
PLAU0228	Category M power plug (Australia / New Zealand / China)	1
PLHK0245	Category G power plug (Hong Kong / UK)	1
PLEU0229	Category C Power plug (Europe)	1
AM3100T2- Z0 or 200350*	Accelerometer, top exit	3
AS3100S2- Z0 or 200350*	Accelerometer, side exit	1
151M8244- 01	Accelerometer cable, coiled, safety breakaway	4

Part Number	Description	Qty
113M5585	Accelerometer magnetic base	4
109M2385- 012	BNC to silver-LEMO cable. Connects rack buffered outputs to CH1/CH2 inputs.	2
110M8172- 012	BNC to black-LEMO cable. Connects rack buffered Keyphasor to Tach input.	1
113М9350	Channel 2-4 breakout cable	1
109M2384- 01	Anti-static neck strap with Sensor Keeper	1
112M4551	Hard carrying case	1
109M1269	SCOUT200 Series User Guide	1
109M1270- 01	SCOUT200 Series Quick Start Guide	1
Bently_ Manuals DVD	Contains the SCOUT220IS and SCOUT240IS Product Datasheet (109M0226), the SCOUT200 Series Quick Start Guide (109M1270), and the SCOUT200 Series User Guide (109M1269)	1

<sup>\*</sup> Kit items with multiple part numbers listed have limited regional availability due to certification requirements.



Metrology certification can be requested when an order is placed, however this service is charged. Standard test data can be requested for free, but is not evidence of calibration.

To request a periodic metrology calibration, contact **Bently Nevada Tech Suppport**.



### **Optional Accessories**

Hand Held Devices		
146M8212-01	Smart-Ex 02 DZ2 (North America & Europe)	
146M8216-01	Smart-Ex 02 DZ1 (North America & Europe)	
145M3278-01	Tab-Ex DZ2 North America	
146M8220-01	Tab-Ex DZ2 Europe	
151M7906-01	Tab-Ex DZ1 North America	
151M7907-01	Tab-Ex DZ1 Europe	
157M5734-01	iSafe IS930.1 North America	
158M0806-01	iSafe IS930.1 Europe	



To obtain a handheld device suitable for a location not listed above, contact a handheld device distributor within the destination country.

Other Accessories		
3071/01	System 1 software and license	
109M2387	Handheld, battery-powered laser tach for IS zone 0. Order cable separately.	
109м2389	1.2-meter cable for laser Tach 109M2387	
108M4069	Laser Tach powered by SCOUT220-IS and SCOUT240-IS, for Zone 2.  Order cable separately.	

	Other Accessories
CBL50216	5-meter cable for laser Tach 108M4069.
122M9408	Monarch Compact Smart Laser Sensor (CSLS). Higher powered (3 mW) but larger size (2.6" x 2.4" x 2") and no Zone rating. Order cable separately.
125M2099- 01	Cable for CSLS laser, 1.5 m
113M5529- 01	Reflective tape One roll, 60 cm (23.7 in)
VBMR0222	Pair of safety rings for attaching strap to data collector
138M7749	Accelerometer cable, 4 ft, straight, safety breakaway
AP3500T2- Zl	Accelerometer, top exit , 500 mV/g, 10 g pk, 0.2 Hz - 2.3 kHz, Div 1 & Zone 1 rated
AP3500S2- Z1	Accelerometer, side exit , 500 mV/g, 10 g pk, 0.2 Hz - 3.7 kHz, Div 1 & Zone 1 rated

# **Accessory Kits**

#### Balancing Kit - 161M0958

Part Number	Description	Qty
113M5529-01	Reflective tape One roll, 60 cm	1
LASA0315	Laser Tach Kit Zone 2 rated	1
CBL50216	Laser cable Five meters	1
MAGA0063	Laser magnetic stand	1
159M9583*	Sensor extension cable, 5 m	2
CBBL0026	Carrying case for the kit	1



\* Depending on availability, this cable may be substituted with the CB5G0024 and CB5R0025 cables and two 161M2913 adapters.

#### Zone 2 Laser Tach Kit - LASA0315

Part Number	Description	Qty
108M4064	Laser Tacho Holder	1
108M4066	Circlips - 20Mm Stainless	1
108M4067	Arp115 Oring	2
108M4069	Laser Tach Zone 2 rated	1

#### **Triax Sensor Kits**



Triaxial sensor kits are certified for hazardous area use in limited regions (NAM, EU, etc). Other regions may need to source locally. Contact TechSupport for suggested manufacturer part numbers.

#### 157M0806-01 (Zone 2, Class 1 Div 2)

Part Number	Description
156M6189	Triaxial sensor, 100 mV/g ± 20%, 0.5 Hz 5 kHz, 8 µg/√Hz noise @ 10Hz
157M0852-01	Cable for SCOUT200 to triax 156M6189, 1.5 m, straight, safety breakaway
156M6204	Magnet, 2 pole, 38 mm diameter, 32 mm high, 25 kg pull, ¼-28 female thread

#### 157M0809-01 (Zone 0, CSA, IECEX, ATEX)

Part Number	Description
155M3055	Triaxial sensor, 100 mV/g ± 10%, 0.6 Hz 10 kHz, 27 µg/√Hz noise @ 10 Hz
156M6180	Cable for SCOUT200 to triax 155M3055, 1.5 m, straight, safety breakaway
154M1355	Magnet, 2 pole, 35 mm diameter, 22 mm high, 23 kg pull, ¼-28 female thread, triax alignment notch

# **Language Specific Warning Labels**

Magnet base label	
Sensor keeper side label	
Sensor keeper front label	
Hard carrying case label	



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