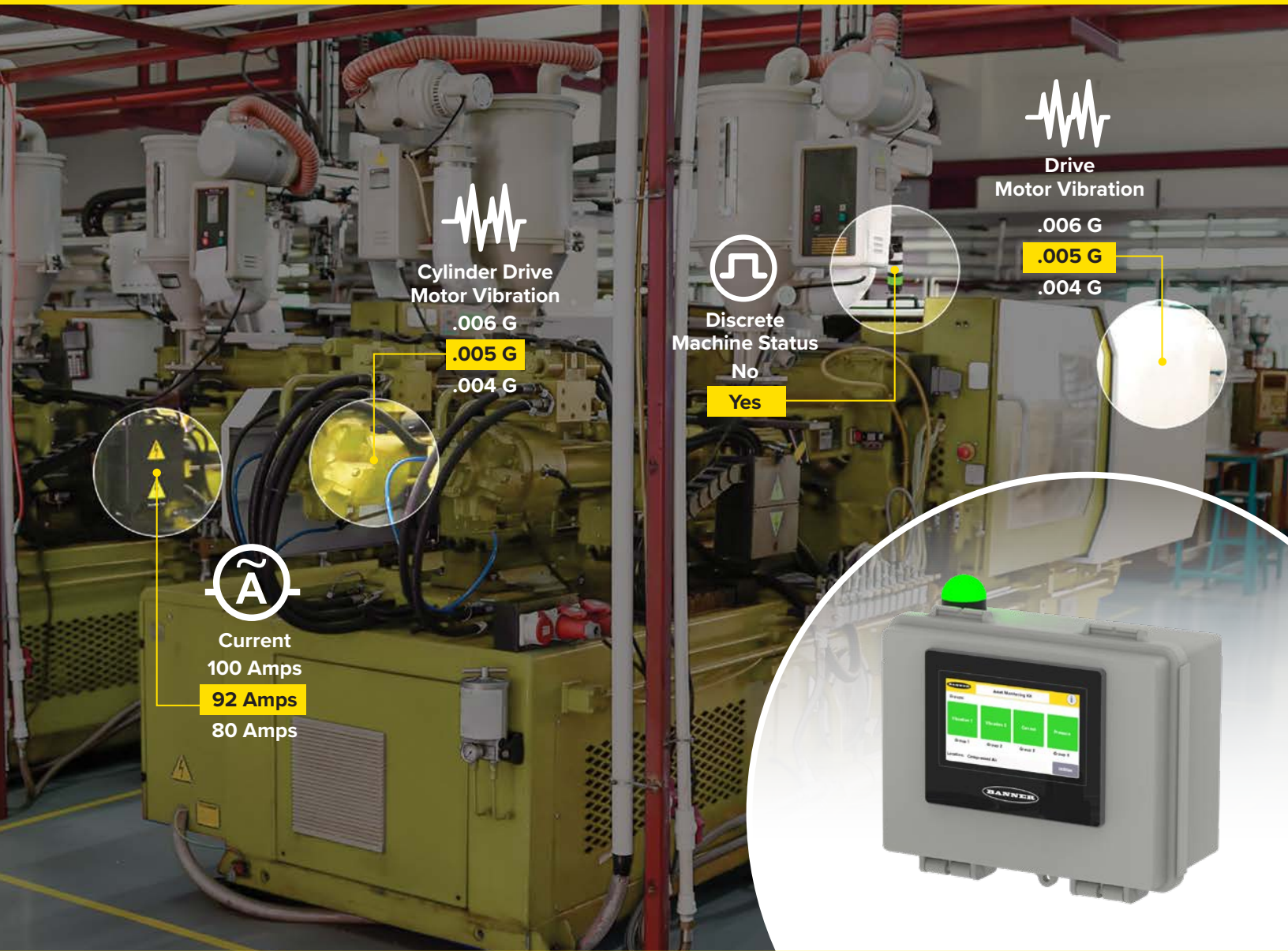


Asset Monitoring Gateway with SNAP ID™



Reliable and Efficient Operation of Your Facility's Equipment

- Enables informed maintenance decisions and supports increased uptime by providing real-time equipment health insights
- Installs easily and works on nearly any piece of equipment, new or old, regardless of type or brand
- Provides ready access to sensor data and setup via touchscreen display

Asset Monitoring Gateway with SNAP ID™

SNAP ID is our technology that simplifies setup and eliminates the need for programming by enabling our gateways to automatically recognize a sensor, understand what data it is able to share, and scale the data into more easily understood units like pressure and current instead of milliamps or volts.

Pick Your Gateway, Pick Your Sensors

There is no guesswork when it comes to creating a monitoring solution for your equipment with SNAP ID. All you do is pick the gateway you need along with up to 20 sensors to monitor the points on your equipment.



Set Up in Three Simple Steps:

1. Install and power up the Asset Monitoring Gateway
2. Connect and address the sensors
3. Install sensors on equipment and commission the system

Local Display

Critical system information is easily viewed locally via the onboard touchscreen display and it can also be sent to the cloud for remote monitoring.

Machine Learning with VIBE-IQ™

VIBE-IQ continuously monitors vibration on your rotating equipment like motors, bearings, and pumps. It does all the complicated analytical work, making the process simple for users by providing a "check engine light" to signal maintenance teams when potential problems arise.

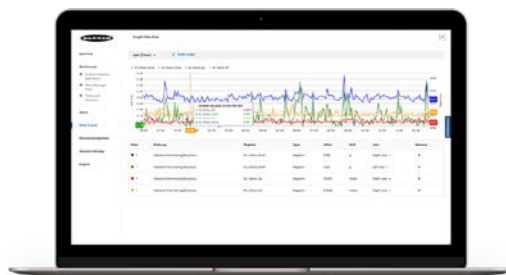
View Your Equipment's Data Remotely with Banner Cloud Data Services (CDS)

Pre-Configured Web Dashboards

Banner Cloud Data Services lets users set condition-based alerts from the cloud using multiple metrics of event severity and duration of time. These provide remote users with emails or SMS, based on parameters set in the cloud. Running multiple shifts? Set time constraints so the right people get notified at the right time.

Customizable Dashboards and Alerts

If you want a more customized look, building a dashboard in Banner CDS is easy. Drag-and-drop widgets and the ability to load images to your dashboard let you build exactly what you need to visualize your operation. Create alarms and alerts for the measurement sensors installed on your equipment.



Think Big, Start Small, Scale Fast

Equal parts brains and beating heart, Banner's Asset Monitoring Gateway helps optimize and maintain your critical equipment. Start with a few connected sensors, then simply add more as your needs grow. Additional Asset Monitoring Gateways can be plugged in to accommodate even more sensors. Your asset monitoring system can be as big—or as small—as you need it to be, and it always assembles quickly and simply, and operates with ease.

Select Your Asset Monitoring Gateway with SNAP ID

Options are based on your needs for data connectivity

Description	Network	Cloud and Cell	Models
Asset Monitoring Gateway with SNAP ID (See last page for dimensions, specifications, and included accessories)	Ethernet	No cloud or cell	AMG-SNAP-ID
		Includes 1-year of Banner Cloud Data Services	AMG-SNAP-ID-C
	AT&T (SIM)	Includes 1-year of Banner Cloud Data Services and 1-year of cell network connectivity	AMG-SNAP-ID-A
	Verizon (SIM)		AMG-SNAP-ID-V
	Multi-carrier (SIM)		AMG-SNAP-ID-W

Compatible Sensors for your Asset Monitoring Gateway

You can have up to 20 sensors connected to one Asset Monitoring Gateway. Select from the list of compatible sensors below to begin monitoring more equipment.

Vibration and Temperature Sensors



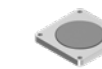
Input	Output	Housing Type	Connection	Models
Vibration and temperature	Modbus	Aluminum	2 m cable with a 5-pin M12 male quick disconnect	QM30VT2
			150 mm cable with a 5-pin M12 male quick disconnect	QM30VT2-QP

Accessories



Curved surface magnet mount

BWA-QM30-CMAL



Flat surface magnet mount

BWA-QM30-FMSS



Flat surface screw mount with rapid release set screw

BWA-QM30-FSALR

More Compatible Sensors

Current Transformers



Input	Output	Measurement Range	Connection	Model
Current transformer	Modbus	0–20A	Integral M12 male quick disconnect	S15C-CT20A-MQ
		0–150A		S15C-CT150A-MQ
		0–600A		S15C-CT600A-MQ

Infrared Non-Contact Temperature Sensor



Input	Output	Measurement Range	Connection	Model
Temperature	Modbus	Temperature: -40 to +85 °C (-40 to +185 °F)	Integral M12 male quick disconnect	S15S-T-MQ

Brackets



Stainless steel mounting flange with m5 screw holes **SMB-S15S-SWIVEL**



Stainless steel mounting flange with m5 screw holes with mounting magnets included **SMB-S15S-SWIVEL-MAG**

In-Line Converter with Thermistor



Input	Output	Measurement Range	Connection	Model
Thermistor	Modbus	-20 to 105 °C (-4 to +221 °F) (+/-1.5C, 10K Ohm thermistor, Beta Constant = 3575K (G-Curve))	Integral M12 male quick disconnect	S15C-TMS-MQ
2 x Thermistor				S15C-DTMS-MQ

Temperature and Humidity Sensor



Input	Output	Measurement Range	Connection	Model
Temperature and humidity	Modbus	Temperature: -40 to +85 °C (-40 to +185 °F) Humidity: 0 to 100%	Integral M12 male quick disconnect	S15S-TH-MQ
				M12FTH3Q

Dewpoint Sensor



Input	Output	Measurement Range	Connection	Model
Temperature and humidity	Modbus	Temperature: -40 to +85 °C (-40 to +185 °F) Humidity: 0 to 100% Dewpoint: -116 to +85 °C (-176 to +185 °F)	Integral M12 male quick disconnect	S24AS-D-MQP

Differential Pressure Sensors



Input	Output	Measurement Range	Connection	Models
Pressure	Modbus	±1 inches water column	2.09 m 5-pin M12 pigtail quick disconnect	QM42-DPS1-2Q
		±5 inches water column		QM42-DPS5-2Q
		±20 inches water column		QM42-DPS20-2Q

Brackets



Magnetic bracket with screws **BWA-BK-001**



Center mounting bracket with screws **BWA-BK-005**

Pressure Sensor



Input	Output	Measurement Range	Connection	Models
Pressure sensor	Modbus	0–150 PSI*	4-pin M12 male quick disconnect, 1/4 inch NPT fitting	S15C-PS150C-MQ

*Ceramic element intended for gas media only

More Compatible Sensors



Ultrasonic Sensors

Input	Output	Range	Frequency	Connection	Models
Ultrasonic level	Modbus	300 mm to 3 m	114 kHz	230 mm integral 5-pin M12 male quick disconnect	K50UX2CRA
		100 mm to 1 m	224 kHz		K50UX2ARA

Brackets



Mounts both the K50U Ultrasonic sensor and a Wireless Q45U Node or DX80 Node

BWA-BK-004



Mounts a K50U Sensor and Wireless Q45U Node

BWA-BK-006

In-Line Converters

Can be used to collect signals from other devices currently on or planning to be used with your equipment.

Female	Male	Connection	Models
Discrete input	Modbus	5-pin M12 male quick disconnect	S15C-B22-MQ
Analog current			S15C-I-MQ
Analog voltage		4-pin M12 female/male quick disconnect	S15C-U-MQ
RTD			S15C-RTD-MQ



Specifications



Supply Voltage	10 to 30 V DC
Housing	ABS/Polycarbonate non-UV stabilized
Operating Conditions	-10 to +60 °C (+14 to 140 °F)
Environmental Rating	IP65

Included Accessories



PSW-24-1
Power Supply



STP-M12D-406
6 ft. Ethernet Cordset
(included with ethernet models only)

Optional Brackets



LMBS15MAG
Attaches to S15C
(magnetic)



BWA-M12CAB-MAG
Attaches to M12 cable
(magnetic)



BWA-BK-020
2 - 80 lb magnetic mounts
(to mount gateway order two sets)

Molded Junction Blocks



Trunk	Branches	Connection	Models
No Trunk/Integral QD (male)	4 x No Branch/Integral QD (female)	M12 quick disconnect	R50-4M125-M125Q-P
	8 x No Branch/Integral QD (female)		R95-8M125-M125Q-P

Splitters



Trunk	Branches	Models
No Trunk/Integral QD (Female)	2 x No Branch/Integral QD (Female and Male)	CSB-M1250M1250-T
No Trunk/Integral QD (Male)	2 x 0.3 m (Female)	S15YB-M124-M124-0.2M

Cordsets



Description	Length	Connection	Models
Double-ended cordset	1 ft.	M12 quick disconnect	MQDEC-401SS
	3 ft.		MQDEC-403SS
	6 ft.		MQDEC-406SS
	10 ft.		MQDEC-4010SS



Banner Engineering Corp.

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