Base Station (SD-B)

The Base Station is the nerve center of any industrial SmartDiagnostics® installation, allowing effective predictive maintenance for industrial equipment. The Base Station provides a simple, plug-and-play receiver location with minimal configuration or setup necessary, and its ruggedized construction makes it appropriate for all industries.

- Relays data from sensor nodes to SmartDiagnostics® analysis software
- Integrated Collection Server & Primary Receiver Node
- May be expanded using Repeater (SD-R)

Give Your Machines a Voice™

Remote Access

KCF's Base Station enables the user to place wireless sensors in remote locations, providing communication to the cloud or local data analysis computer. A single Base Station can interface with multiple Repeaters to gather data from various locations in a plant. Base Stations can operate unattended and may be managed remotely.

Reliable Data

The SmartDiagnostics® Base Station is a ruggedized industrial computer used to manage and organize the data collected from sensor nodes, providing guaranteed delivery of sensor information even when the data analysis computer is offline. The Base Station complements the data analysis software by pre-processing sensor data before conveying the information to the software database.

Simple Networking

The Base Station relays data to the analysis software, either on a local computer or in the cloud, through a network connection. This can be accomplished via:

- Ethernet (IEEE 802.3)
- Wi-Fi (IEEE 802.11)
- Cellular data network

Each option has its own benefits depending on the setup of the plant.

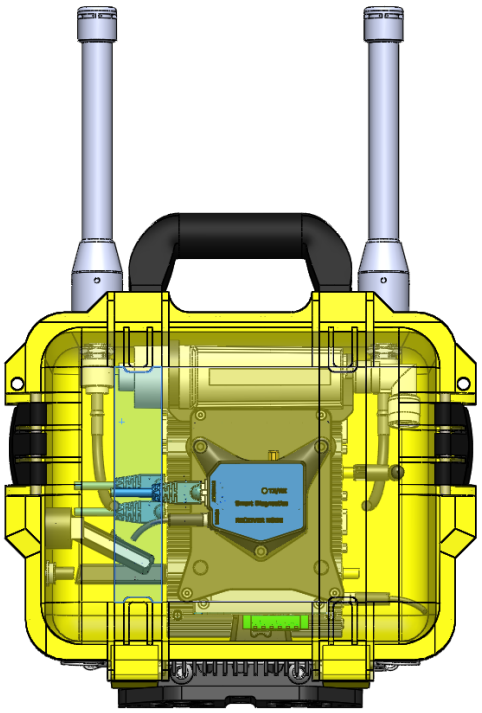
SMARTdiagnostics®

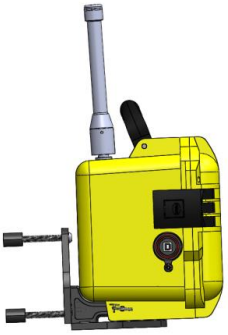
Learn more at **kcftech.com/smartdiagnostics**

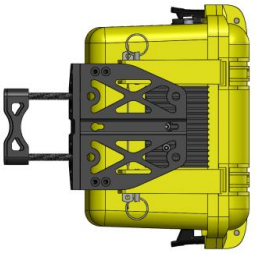
Base Station Specifications

Mechanical	
Size	11.8 x 9.8 x 7.7 in (300 x 250 x 200 mm) without cables or antennas
Weight	9.8 lb (4.4 kg)
Environmental	
Storage Temperature	-40 to 176 °F (-40 to 80 °C)
Operating Temperature	32 to 140 °F (0 to 60 °C)
Case	Pelican Storm iM2075 Case
IP Rating	IP 65
Software And Connectivity	
Software	BalenaOS (Linux)
Network Communications	• Ethernet (IEEE 802.3) • Wi-Fi (IEEE 802.11) • Cellular (call for data plan specifics and pricing)
PRN Connectivity	1 PRN included Add up to 4 optional Repeaters for additional PRNs
Power	
Power Source	110-240 VAC 50/60 Hz
Power Consumption	≤60 Watts
Wiring	Standard three-blade AC Power cable SJOOW rated, 7 ft
Data Reliability	
Offline Data Caching During Network Outage	• Stores up to 285,000 vibration data samples • Automatic retransmission of cache when communication is restored

Example: 50 Vibration Sensors with 1 Collection Server	**Collection Frequency**	**Days of Offline Storage**
	1 minute	4 days
	10 minutes	40 days
	1 hour	238 days







Compatible Accessories

Part Number	Description
SD-BR-ANT	External Antenna Extension (allows antenna to be remotely mounted from Repeater box)
SD-R	Repeater (Remote unit which adds a PRN at a remote location and relays remote sensor data back to Base Station)
SD-MNT	Universal Mount (allows mounting to poles, walls, work benches, vehicles, etc.)

KCF technologies

© KCF Technologies, Inc.
336 South Fraser Street
State College, PA 16801
www.kcftech.com

Sales and Support
(814) 867-4097
(814) 690-1579 Fax
sales@kcftech.com