

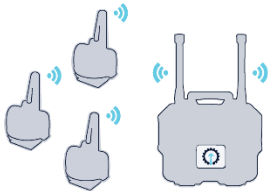


SMARTdiagnostics®

BASE STATION (SD-BASE)

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)



REMOTE ACCESS

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

RELIABLE DATA

The SMARTdiagnostics® Base Station is a ruggedized industrial computer used to manage and organize data collected from sensor nodes, providing guaranteed sensor information delivery even when communication with SMARTdiagnostics® is temporarily unavailable. The Base Station also pre-processes sensor data before conveying it to SMARTdiagnostics® in the cloud.

SIMPLE NETWORKING

The Base Station relays data to SMARTdiagnostics® in the cloud, through a network connection. This is 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.

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

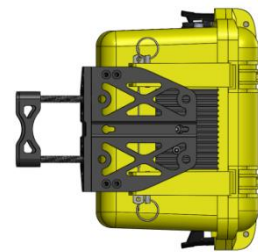
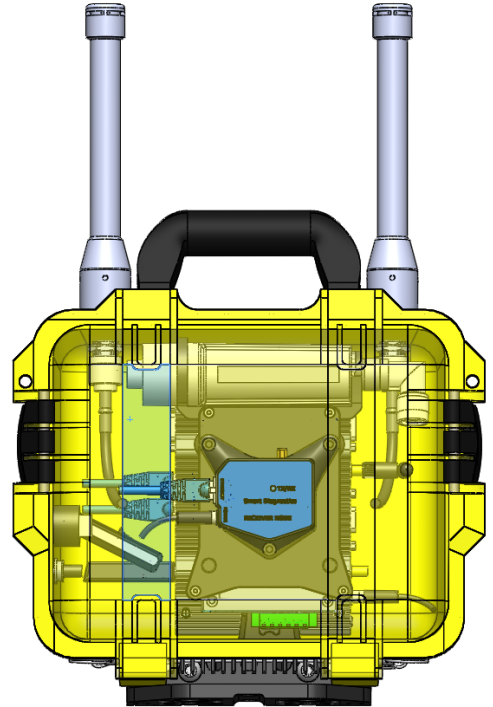
Software	Linux
Network Communications	<ul style="list-style-type: none"> Ethernet (IEEE 802.3) Wi-Fi (IEEE 802.11) Cellular (call for data plan specifics and pricing)
PRN Connectivity	1 PRN included Add up to 4 optional Repeaters for additional PRNs

Power

Power Source	110-240 VAC 50/60 Hz
Power Consumption	≤60 Watts
Wiring	Standard three-blade AC Power cable SJ00W rated, 7 ft

Data Reliability

Offline Data Caching During Network Outage	<ul style="list-style-type: none"> 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.)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes Or Modifications Not Expressly Approved By The Party Responsible For Compliance Could Void The User's Authority To Operate The Equipment.