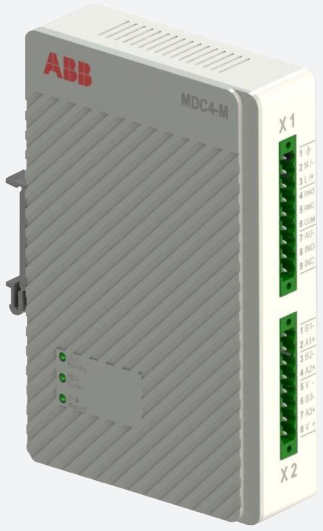
DISTRIBUTION SOLUTIONS

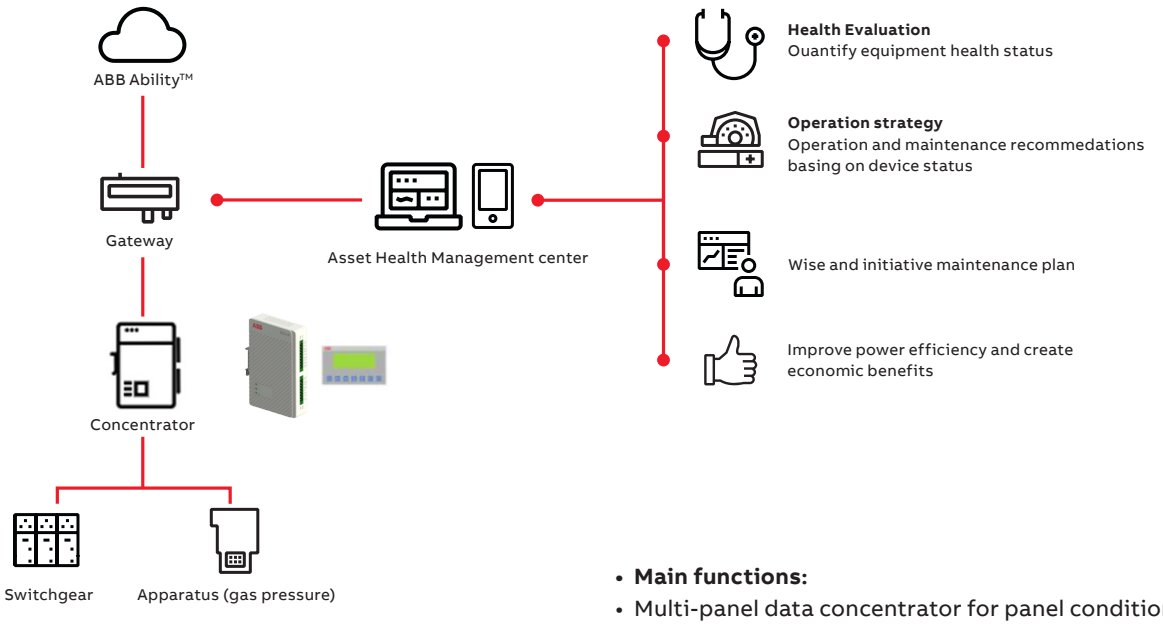
UniSec Digital

Data concentrator MDC4-M



Monitoring and diagnostic function in medium-voltage secondary switchgear UniSec Digital support the operators to understand the current operating condition and potential maintenance needs.
Data concentrator devices are applied to connect sensors and smart devices and to collect and analyze their data.
The data concentrator MDC4-M is available for UniSec Digital, air insulated medium-voltage switchgear by ABB.
Its data are accessible on a local HMI panel, mobile app or through communication.
For the communication upstream to electrical control systems such as ABB Ability™, ABB's ZEE600 or any SCADA, the data concentrator offers Modbus RS485 communication.

Note: the graphic shows logical connection only, actual network configuration based on selected components may differ.



Benefits:

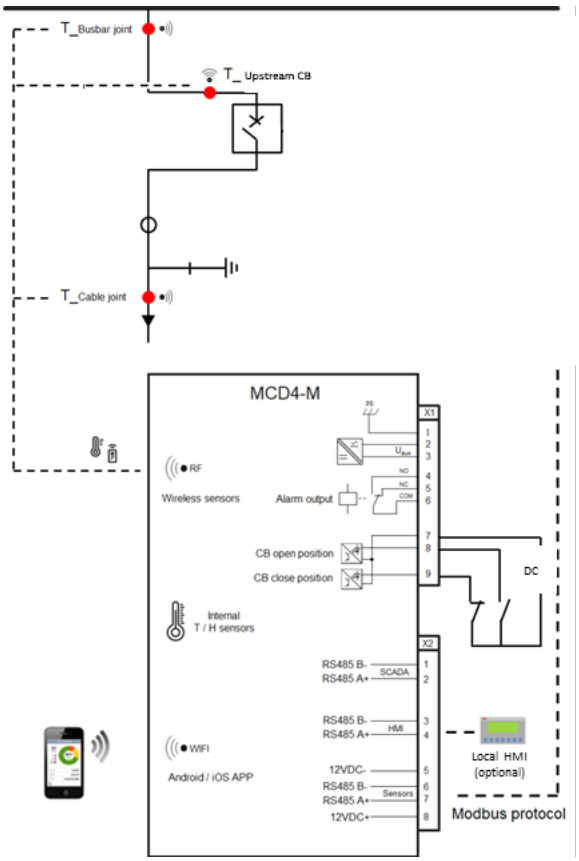
- Increased switchgear safety and operational efficiency with continuous thermal monitoring of critical joints.
- Understand the ambient operating condition for switchgear by monitoring temperature and humidity.
- Access to switchgear condition from remote location outside of the switchgear room.

- **Main functions:**
- Multi-panel data concentrator for panel condition monitoring (thermal monitoring, environment condition, switch disconnector gas pressure).
- Integrated interface to a mobile app for configuration and monitoring (through dedicated WIFI interface in switchgear room).
- Engineering tool for fast configuration of thermal sensors and data concentrator function on a PC.
- Modbus RTU communication to upstream systems.
- Integration with ABB Ability application.

Data concentrator product overview:

Data concentrator MDC4-M

Connection diagram



Optimize

Efficient operation and maintenance,

- Shift from planned maintenance to condition-based maintenance,
- Reduce reactive maintenance costs with faster identification,
- Avoid unplanned outages and conduct maintenance when and where necessary.

Analyze

Data provided collected by the data concentrator are analyzed and available on local HMI and communication interface,

- Data monitoring is enabled from commissioning throughout entire lifetime,
- Continuous data analysis that also improves over time with more details collected.

Technical data	Value
Voltage input	110-240 V AC 50/60 Hz110-240 V DC
Power consumption	12 W max
Transport and storage	-40 ... 85 °C
Operating temperature	-20 ... 70 °C
Humidity	20 ... 85%
Altitude	Up to 2000 m
Overvoltage category	III
Pollution degree	2
IP grade	IP 20

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1VCP000982 - Rev. A -, en - Flyer UniSec Digital MDC4 - 2022.10 (gs)