

Two-Way Communication from Station to Software

Sensors collect data from the field based on user defined intervals. Some sensors allow for direct measurement storage, post-processing on raw data, and programing of custom transmissions

Physical inputs: Sensor protocols:

• SDI-12

UMB

Modbus

Specific

TCP/IP

RS-232 Customer

- SDI-12
- RS485
- RS232 Status
- Impuls
- Frequency
- Analogue (U/I)
- Ethernet

Data loggers allow for local operation via:

- Integrated display
- Wireless connection to operating system on Windows PC or Smartphone app
- Wired connection to operating system

Loggers perform the following actions:

- Collect measurements at flexible intervals
- Process data
- Store data

 Output data signals (i.e. power up or control external device)

 Transmit data for events and alarms

Telemetry options that also allow for two-way communication include:

- Mobile com
- LAN
- IoT

Data is transmitted via telemetry such as satellite and cellular.

Telemetry options can include:

- Mobile com
- LAN

 Geostationary satellite low orbit

- IoT
- LOS/Radio
- Industrial Communication (Bus/OPC)

End users can access • Car

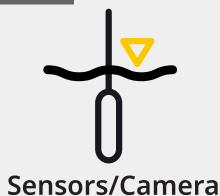
Office

the data fully • Home Cell phone remotely,

Software solutions receive data, either on-premise or cloud, in order to:

- Automatically import and integrate in minutes
- Correct and quality assure
- Compare raw and corrected data
- Build rich statistics, maps, alarms, and live reports

Data to You

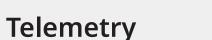




Datalogger









Software



End User

Data to Field

Sensors receive inputs directly from the data logger in near real-time to immediately adjust settings and perform diagnostics in the field.

Make critical decisions quickly by having remote access to your field equipment at all times. Remote communication allows for increased confidence in data by ensuring accuracy and no data gaps.

Data loggers receive

TCP/IP

information via:

FTP (secure)

 HTTP (secure) VPN

Receiving Station

Gateway

• PLC

- Socket
- SMS
- Satellite

Avoid costly, time-demanding trips to the field by sending commands and checking data remotely.

Quickly visualize and forecast potential problems using software like <u>AQUARIUS</u> directly from your office or computer.

Use software solutions to send remote commands to dataloggers in the field including:

- Power on/off
- Download data
- Adjust alarm thresholds
- Finetune measurement setups to improve data capture
- Run diagnostics
- Update firmware

