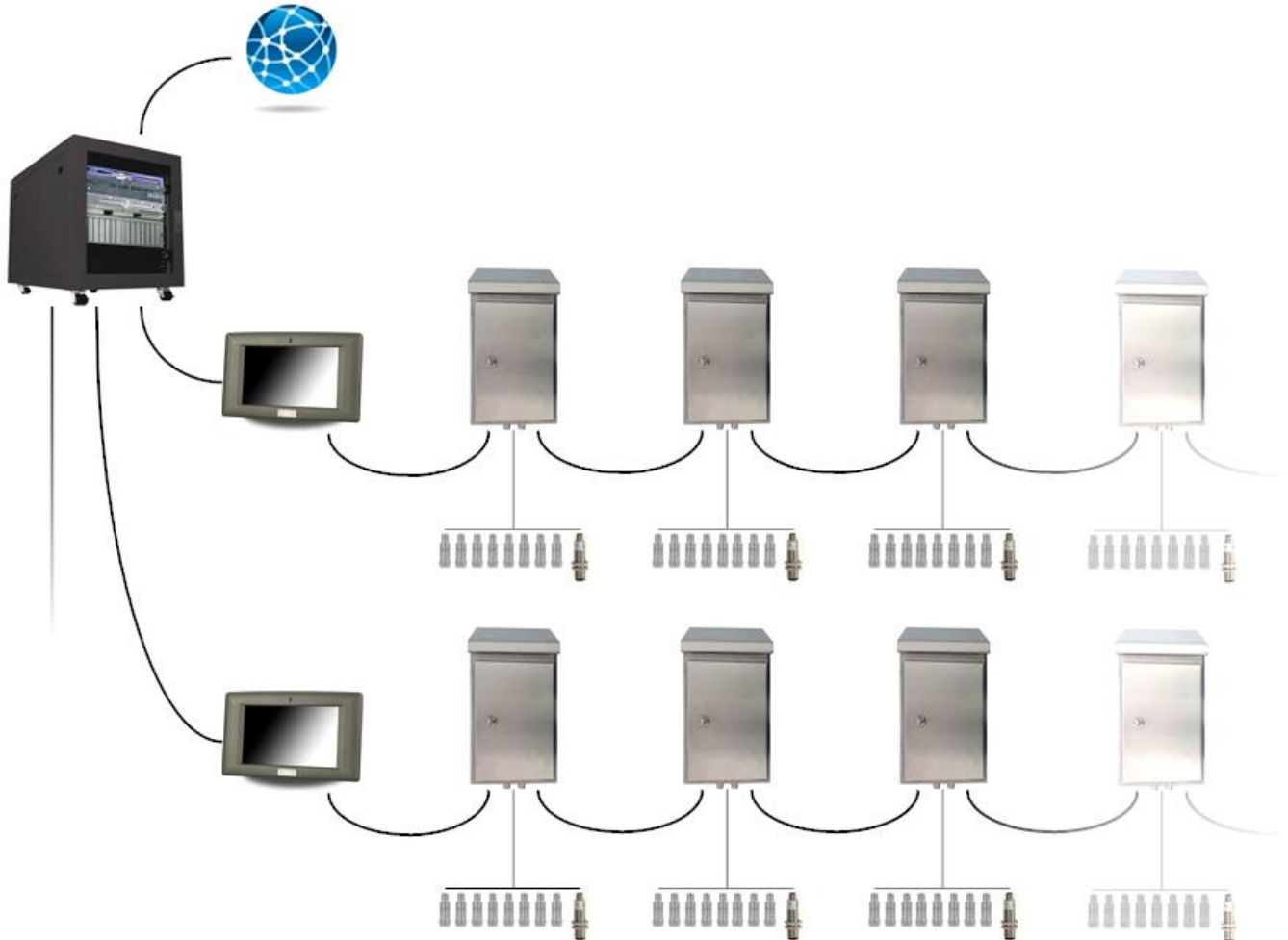


SYSTEMREPORTER^{MULTI}



- **Cost-effective online condition monitoring system for complex applications (paper machines)**
- **Small footprint – can be installed in existing cabinets**
- **Very low installation and maintenance cost**
- **Alarms via SMS and/or email for maximum security**
- **User-friendly software showing machine and alarm status**

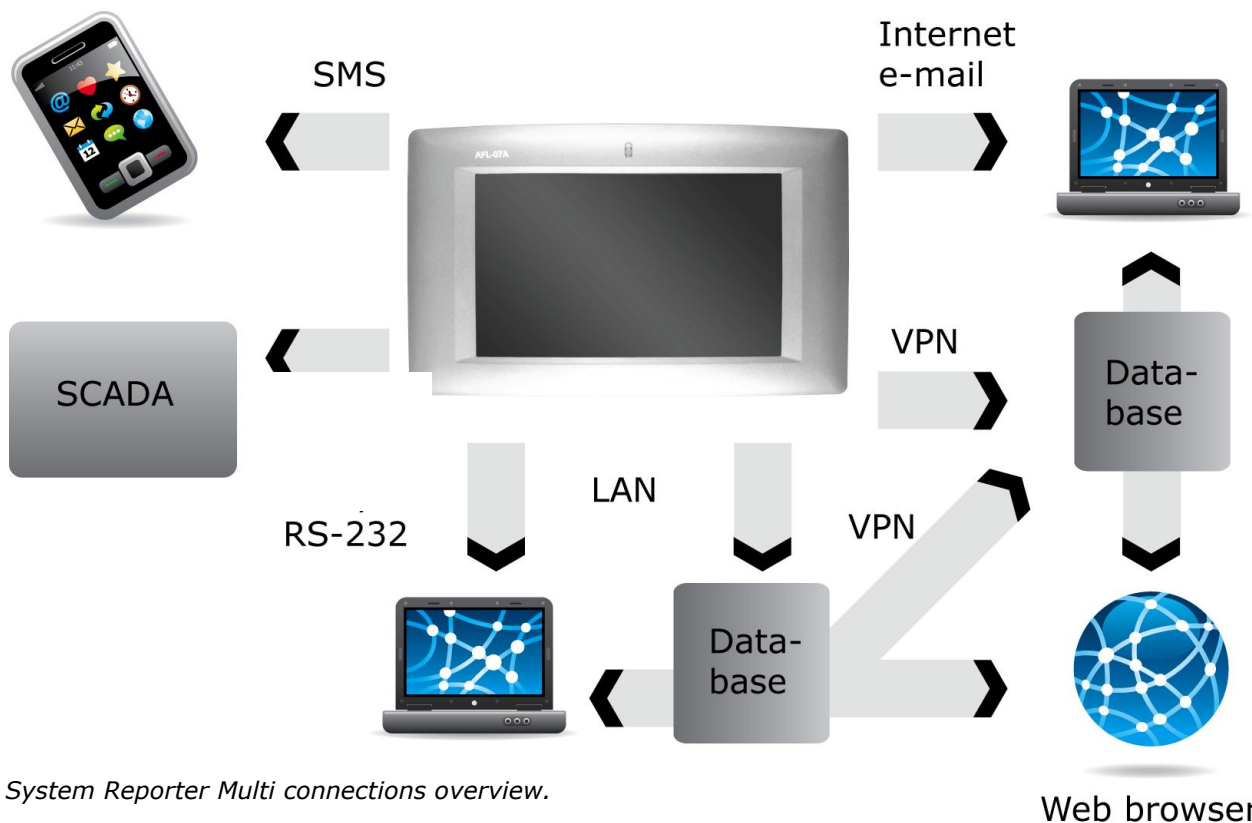
SYSTEMREPORTER^{MULTI} is an online condition monitoring system intended for applications using many transducers, e.g. paper machines. The system is designed to be highly robust and to reduce expensive components at all levels. A system consists of:

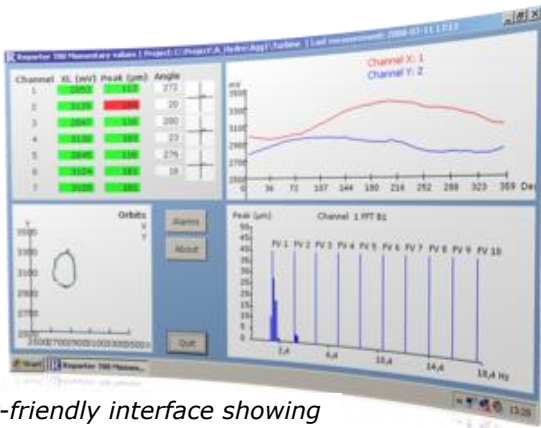
- Measuring station where computer and expensive components e.g. filters are placed
- Up to 16 Driver cards where up to 8 input transducers and 1 pulse transducer are connected

The measuring station is designed around a small computer embedded into a robust, 8" LCD touch screen. The Driver cards are connected serially using low-cost, multi conduit cables, with power supply included, eliminating external power sources. The Driver cards are designed to be placed close to the object to be measured, reducing the length of expensive transducer cables and eliminating junction boxes.

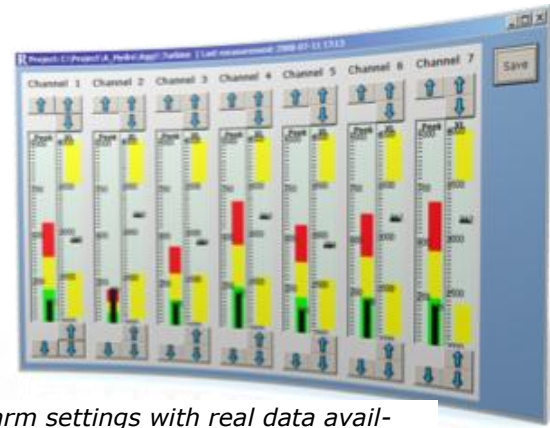
One single industrial computer can handle 128 accelerometers and 16 pulse transducers. Only two computers are required to monitor the rolls and cylinders in the dryer of a typical paper machine, making the system extremely cost-effective regarding both installation and maintenance.

The system can be expanded by adding measuring stations. The cycle time to measure 128 transducers is 5-10 min depending on the configured measurements. This is sufficient for most online applications, e.g. an entire paper machine or the dryer of a fast moving paper machine. If higher sampling rates are required, such as in the press section of a very fast paper machine, one or more **SYSTEMREPORTER^{PRIME}** systems can be added for a total solution.





User-friendly interface showing alarms and analysis data.



Alarm settings with real data available.

SPECIFICATIONS

The system is delivered for mounting in a standard 19" rack (5U height) or in a stainless steel cabinet for wall mounting. Due to its small size the system can also be built into existing cabinets, for a highly cost effective solution.

MEASURING STATION

- 8 input channels which are used to address each Driver card sequentially
 - Active 5th degree programmable filters for all input channels
 - 16 bit sampling resolution with successive approximation on all channels. The fast sampling allows sampling 0-10000 Hz, with adjustable ΔF
- Fan-less Panel PC with 8" touch screen, Windows XP Embedded, 2x LAN (10/100), WLAN (802.11b/g), 2x RS 232, 2x USB (2.0) and Bluetooth

DRIVER CARD

- 8 input channels for input transducers, e.g. accelerometers, distance transducers or temperature transducers 0–10 mV/°C (any combination possible)
 - Accelerometer driver circuit: 24V, 4 mA



- HF RC input filter to eliminate radio frequencies
- 1 pulse transducer (PNP or NPN type)
- The driver cards are placed in robust stainless steel cabinets or in existing cabinets

SOFTWARE

- All sampled and processed data are saved in a local SQL database, which can be replicated to a server on the LAN and further over the Internet
- Alarms can be sent by SMS or email
- Analysis in Windows or in web browser
- Connection to SCADA through standard OPC
- The proven frequency bands of System Reporter, further developed to reduce false alarms
- Replicate data from one or more systems to Lage Technologies for analysis and reporting (optional)





System Reporter Measuring station