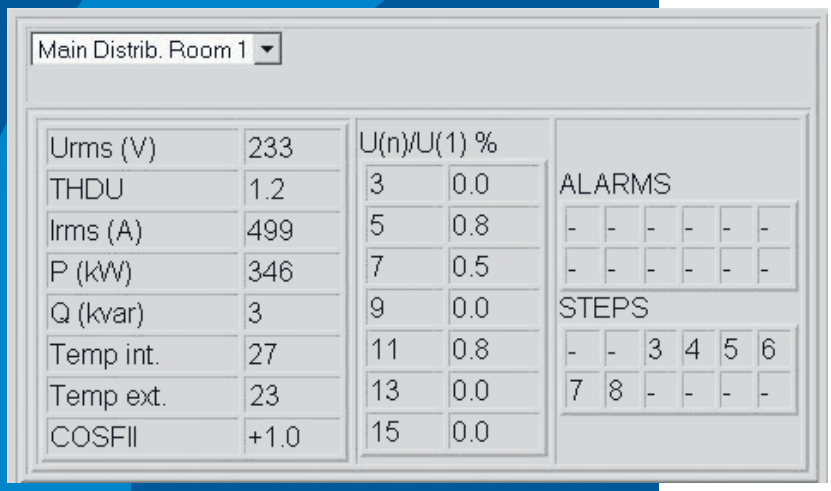
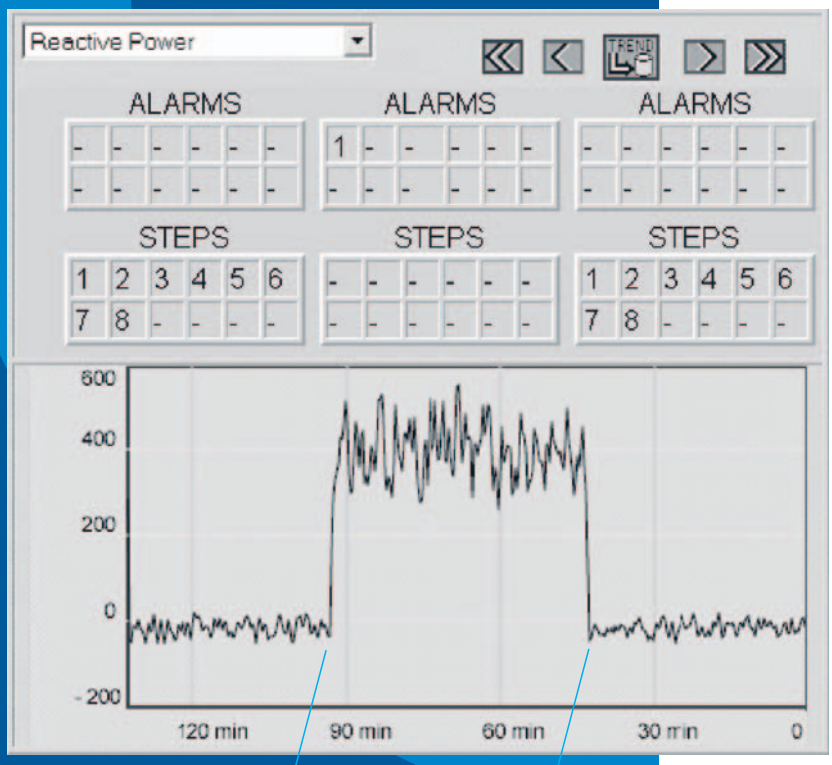
NOKIAN CAPACITORS

NC-Watch solution



An example of monitoring the outage of the capacitor bank



Capacitor bank off due to the missing control voltage for the contactors. Alarm 1 (out of steps) activated.

Control voltage restored. Alarm reseted.

Identify your reactive power usage

Nokian Watch solution makes it possible to know:
- How much reactive power you use.
- When you use reactive power.
- Where you use reactive power.

Management means lower costs

Nokian Watch solution makes it possible to:
- Manage hardware conditions.
- Manage the total energy bill.

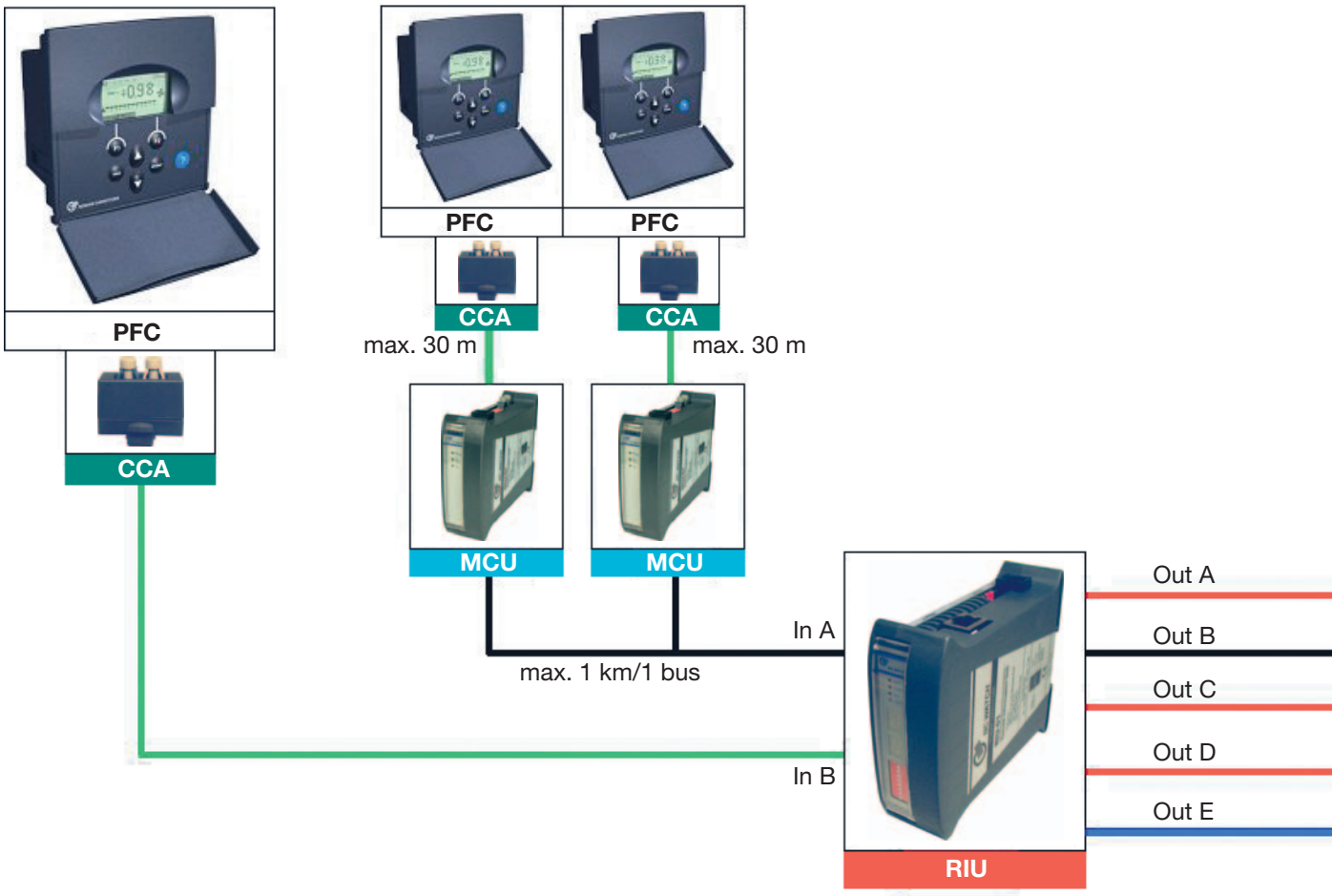
Available now

NC-WATCH solution is a cost-effective system for improving remote control supervision and the complete analysis of your network.

Connecting power factor controller to RIU

One controller is connected to the RIU using an optic fiber.

Multiple controllers are connected to the RIU using multiple MCUs and RS-485 buses.

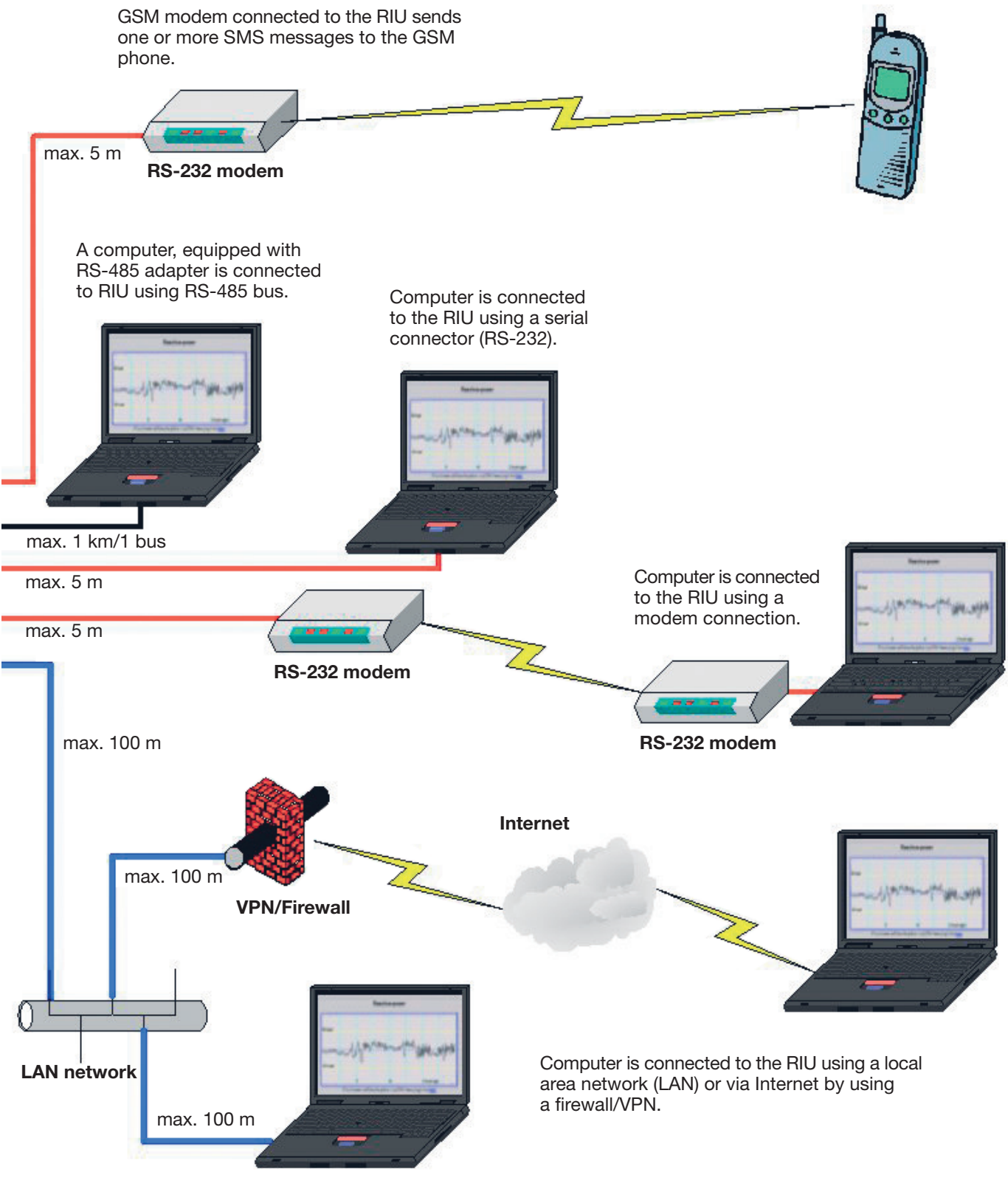


In A and In B : Input connection alternatives

Out A - E : Output connection alternatives

Optic fiber	PFC Power factor controller
LAN cable	CCA Controller communication adapter
RS-232	MCU Modbus coupler unit
RS-485	RIU Remote information unit

Communicating with RIU



RIU (Remote Information Unit)

Serial connector / RS-485 and power supply

1. A’ RX / 4-wire connection
2. B’ RX / 4-wire connection
3. GND
4. A TX 4- and TX RX 2-wire connection
5. B TX 4- and TX RX 2-wire connection
6. Protective ground (1 MOhm to GND)
7. +10...30V DC, 10...20 V AC
8. GND

Optic fiber connector

DIP switch for RS-485 bus

1. A’/B’ Bias +
2. A’/B’ Termination
3. A’/B’ Bias-
4. A/B Bias +
5. A/B Bias -
6. A/B Termination

Info LEDs

Fault
Failure detected

Comm err
Connection error, lost connection to controller.

Act
Data transfer in progress

Alarm
Alarm in controller or in RIU.

Diagnostics / state display

Display depends on the position of the DIP switch.

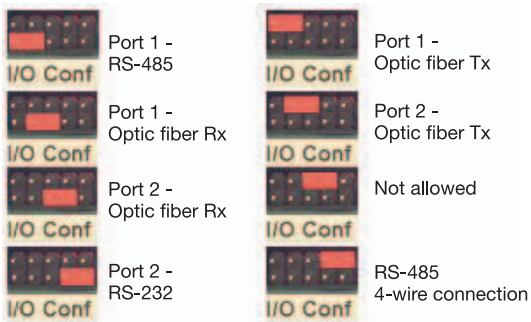
Configuration DIP switches

LAN connector RJ-45

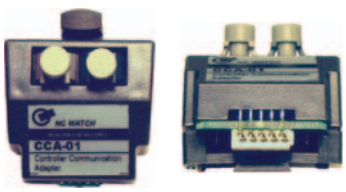
Serial connector / RS-232

1. TX
2. GND
3. RX
4. GND

Jumper settings



CCA (Controller Communication Adapter)



In line with our policy of on-going product development we reserve the right to alter specifications.

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