



## Skalar Devices

### Skalar – A multi-talent

**Scalable, quick and individual. These are the attributes of the new generation of devices.**

**Skalar is a communication computer, equipped with state of the art IP technology and loadable software modules. It enables data transmissions to any destination system. Regardless of the appearance of your application, Skalar offers new prospects in energy data communication and accelerates your business process.**

As a result of the liberalisation of the energy markets, new tasks are assigned to the various participants, namely the network operators, traders, suppliers and customers. To focus on the respective needs, a variety of technical options are required at the measuring point. In addition to the technological aspects of the communication, the format and the further usage of the data displayed play a major role. Consequently a task for Skalar. Due to its novel device concept, metered values can be collected, standardised and transferred to different recipients.

A high-capacity 32 bit microprocessor with 1 Mbyte RAM and 2 Mbyte Flash memory and a real time multi-task operating system (RTOS) are the core of Skalar. The operating system and the software applications can be loaded in the device at any time. Single tasks are brought to execution by means of the scheduler and when you wish them to be carried out.

Communication with one or more remote stations ensues optionally over GSM / GPRS, PSTN, ISDN or Ethernet. The IP based data transmission takes place for instance via the standard application FTP server, FTP client or as email client. Not only user data is transmitted, but new

software modules can also be uploaded and configured and even the entire operating system can be exchanged. Skalar thrives with your demands and presents a high investment security. An internal user administration with passwords and authorisation levels provides the necessary access protection. A safe data transmission is possible even during use in an Internet environment with a Virtual Private Network (VPN).

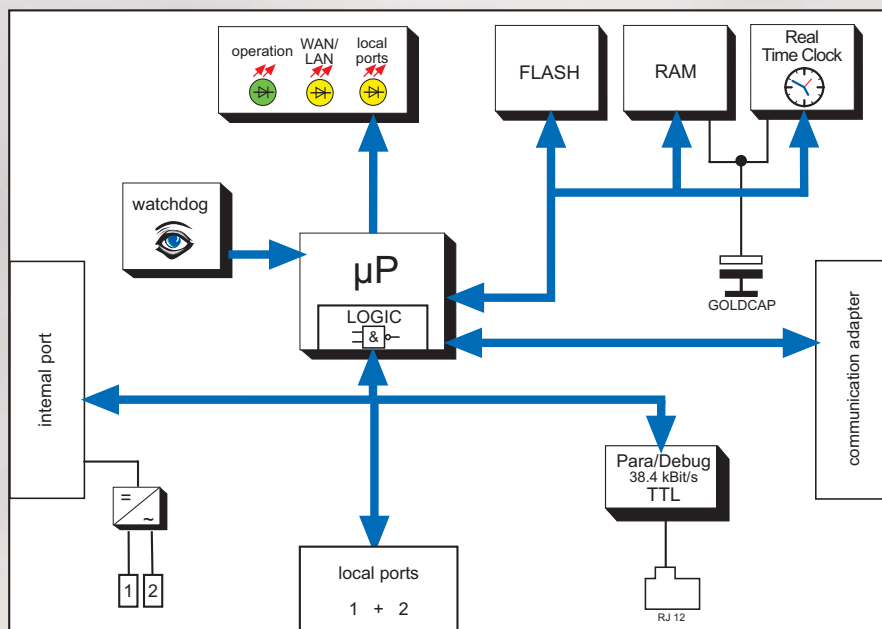
A transparent intelligent data modem with IEC 1107 protocol support is implemented as the first application in the base device. The connection is established to the integrated optional interfaces CL1, RS232, RS485 or Mbus.

Skalar is update-compatible at any time and supports numerous software modules. The administration and initial operation of the device takes place via a parametric cable and the programme SkalarBuilder.

*We provide solutions*

## Technical data Skalar Devices

- 32 bit micro processor system with 1 Mbyte RAM and 2 Mbyte Flash memory
- Integrated real time clock (RTC) with protection against voltage breakdown
- Data communication
  - Analogue PSTN modem, 33.6 kbits/s
  - GSM / GPRS modem, 9,600 bit/s (GSM), max 44.6 kbit/s (GPRS)
  - Digital PSTN modem, 64 kbits/s
  - Ethernet, 10Base2, 10 Mbit/s
- Diverse interfaces:
  - CL1 (IEC 1107/ EN 61107) and RS232 (V.24), to 38.4 kbit/s
  - CL1 (IEC 1107/ EN 61107) and RS485
  - CL1 (IEC 1107/ EN 61107) and Mbus (EN 1434)
  - CL1-8, (IEC 1107/ EN 61107), max. 7 meters cascaded
- Exclusive service and debug interface
- Data retention in event of voltage breakdown for a minimum of 10 days with a service free gold-cap
- Switching power supply optionally
  - with input voltage 100 V/230 V AC, max. 8 VA
  - with input voltage 12 V/24 V AC, max. 8 VA
- Fully integrated module for mounting on a wall, a meter cross or a terminal-cover in housing according to DIN 43863 part 5, protection class IP51
- Extendable modular circuit concept with energy saving 3 volt technology
- Flash and RAM disk with file system
- Upload compatible 32-bit multitasking operating system
- IP protocol (Internet) with authentication and user administration for PPP, IP, TCP, FTP, POP3 and SMTP, FTP server, FTP client and email client
- Optional pulse recorder module PRM62 with six pulse inputs and two pulse outputs



Subject to technical changes and modifications

## Order information

Order number

Skalar with PSTN modem

761P011100	CL1 and RS232 interfaces
761P012100	CL1 and RS485 interfaces
761P013100	CL1 and Mbus interfaces
761P014100	CL1-8 interface

Skalar with GSM / GPRS modem

761G011100	CL1 and RS232 interfaces
761G012100	CL1 and RS485 interfaces
761G013100	CL1 and Mbus interfaces
761G014100	CL1-8 interface

Skalar with ISDN modem

761I011100	CL1 and RS232 interfaces
761I012100	CL1 and RS485 interfaces
761I013100	CL1 and Mbus interfaces
761I014100	CL1-8 interface

Skalar Ethernet

761E011100	CL1 and RS232 interfaces
761E012100	CL1 and RS485 interfaces
761E013100	CL1 and Mbus interfaces
761E014100	CL1-8 interface

Accessories

7500BE0001	SkalarBuilder, single user system
7500BE0002	SkalarBuilder, multi user system
7110020200	Parametric adapter for Skalar devices, PC connection