CALEC® ST III

INTEGRA METERING

Multi-protocol heating / cooling
thermal energy calculator



CALEC ST® III Standard

The foundation of efficiency

Equipped with essential features and a supply range from 24 to 240 VAC, CALEC ST® III Standard provides valuable insights into thermal energy consumption and offers real-time data monitoring and analysis. With a user-friendly interface and handling, this variant enables optimal energy inefficiencies identification and smooth systems optimisation.

CALEC ST® III Smart

Evolution redefined

CALEC ST® III Smart is a version introducing evolved capabilities in terms of control and efficiency enhancement. In addition to that, the Smart variant also features a supply range from 110 to 240 VAC, one power supply output (24V/3,6W), and allows one additional slot for optional functions modules.

CALEC ST® III Advanced

Precision at its finest

CALEC ST® III Advanced is packed with advanced features that enable state-of-the art monitoring. With its two power supply output and up to six slots for optional functions modules, this variant is the perfect solution to anticipate future energy demands and takes a further step towards optimisation of energy consumption

Benefits

- Covers all applications: heating, cooling, combined heating/cooling, water/glycol, multi-tariff and flow meter
- Future-designed communication interface for high flexibility
- Easy commissioning and user-friendly handling

Note: Photo for illustrative purposes only

IoT ready

Features & Benefits

For heating, cooling, solar heating, or air-conditioning systems

Optimized display and backlight and improved button usability

Appropriate for water and other heating or cooling media

High modularity for communication interfaces

Precise thermal energy measurement for all applications in buildings engineering

Extremely wide supply input (24 - 240 VAC)

2 highly-accurate temperature-measurement inputs for connection with PT100, PT500 or PT1000

Metrological approval in accordance with 2014/32/EU (MID) and PTB K7.2 (cold, heat/cold combined)

Android App for commissioning and readout locally

Various communications interfaces available

LoRaWAN, M-Bus wireless, OMS, M-Bus, Modbus, BACnet, KNX, N2Open, LonMark International

Optimizing commissioning cost with enhanced usability

- Multi-tariffs management
- Datalogger freely programmable with 500 values
- Programming and read-out with Android Smart Phone App
- Datalogger features for deep analysis and diagnotics
- Option for on-site calibration settings for easier installation
- NFC and Bluetooth interface for easy commisioning

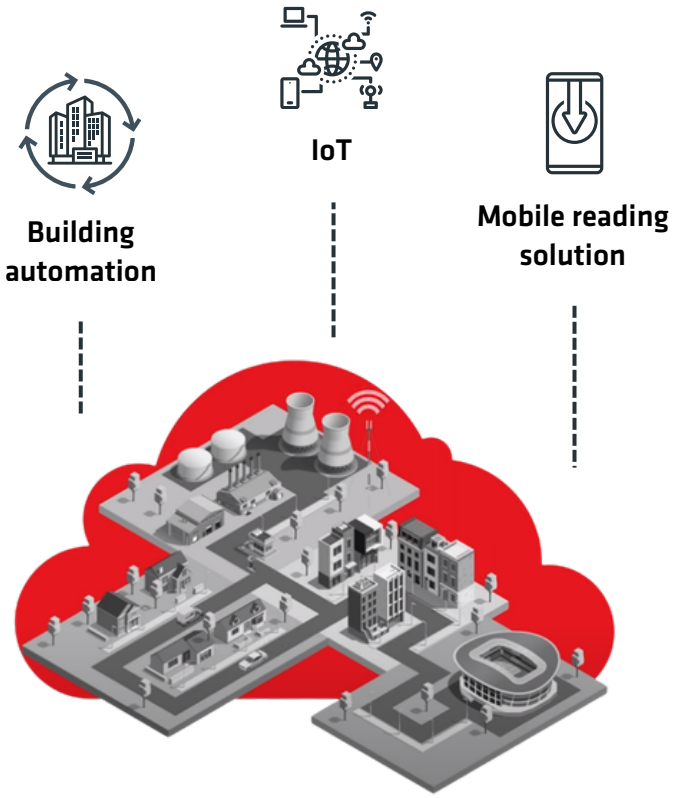


Full integration reading solutions

Building automation
CALEC® ST III has been developed with a full flexibility and large communication options to simplify integration into energy management and building automation systems.

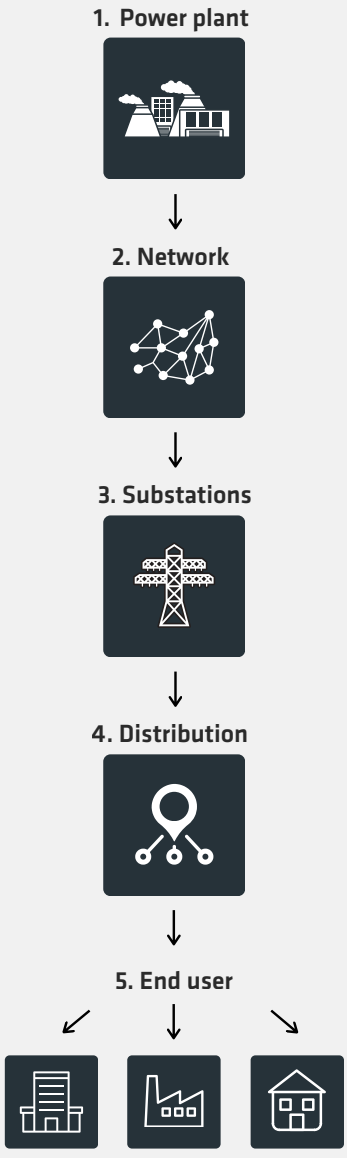
Wireless Radio network and IoT Technology
CALEC® ST III supports radio technology communication for Wireless radio and IoT "Internet Of Things" solution dedicated for smart city, smart building, industry or power plants applications and offering automatic readout, collecting and data monitoring.

Mobile reading solution
CALEC® ST III is built-in with on-board wireless radio protocol supporting mobile reading by either walk-by or drive-by to collect easily all information for billing, analysis and diagnostics.



Measurement of thermal energy, from production to end users

CALEC® ST III has been designed for the areas commercial buildings, building technology, near and district heating/cooling, residential construction, and residential sanitary.



Device variants

For more possibilities in terms of communications and flow sensor supply power, you can choose between different product variants as defined in the below table.

	CALEC® ST III Standard	CALEC® ST III Smart	CALEC® ST III Advanced
Approvals	MID & PTB K7.2		
Temperature sensors	Pt 100, Pt 500, Pt 1000 according to IEC 751 paired in accordance with EN 1434 2-wire or 4-wire connection		
Temperature range	Water: 0...+200 °C Water Glycol: -40...+180 °C		
Temperature difference	0...199k Type approval: 3...199k On demand: 1...199k and 2...199k		
Pulse inputs	2 for Reed, Transistor passive, NAMUR		
Sensor supply 3.6 VDC	2		
Heat transfer medium	Water | Fluids according to list One (1) Fluid rechargeable | Other fluid mix possible on-demand		
Heat meter | Calculator functions	Standard | Mass BDE | BDV | Twin-V TGR | DTF | Twin-E Plus 1 auxiliary input channel*		
Flow computer | Calculator functions	2-channel flow | 2 channel. Flow adder		
Calculation cycle	1 s		
Protection class	IP54 according to EN 60529		
Display	Multi-function with 8-digits, symbols and short texts for user operation		
Display units	kWh, MWh, MJ, GJ, KBTU, MBTU		
Integrated wired M-Bus communication	1		
Communication RS-485	1	2	2
Protocols on RS-485	M-Bus | BACnet MS/TP | Modbus RTU | N2Open		
Integrated Radio communication	wM-Bus / OMS4		
Supply range: 24 - 240 VAC	✓	X	X
Supply range: 110- 240 VAC	X	✓	✓
Power supply output: 24V / 3,6W	X	1	2
Parameterisation interface	NFC | BLE		
Slots for optional functions modules	1	2	6
Optional modules	M-Bus | Modbus | BACnet | N2Open | LoRa (Wireless) | KNX LON TP/FT:10 | 2x Current-Output 0/4-20mA | 2x Digital output signal		

*Additional

3-140-FL-EN-06 / Änderungen vorbehalten / Sous réserve de modifications /
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