

# CALEC® ST III

# INTEGRA

METERING

Multi-protocol heating / cooling  
thermal energy calculator

---



## Your advantages

- > 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

## Features & Benefits

- > For heating, cooling, bi-directional (heating/cooling), solar applications, and air-conditioning systems
- > Precise thermal energy measurement for all applications in buildings engineering
- > Appropriate for water, other heating or cooling media and glycol
- > Multi-tariffs management
- > Modular concept for additional wired communication interface
- > High modularity for additional Wired and Wireless communication Interface
- > "Internet Of Things" ready
- > Onboard Wireless wM-Bus 868MHz
- > Optimized display and backlight with improved button usability
- > Extremely wide supply input (24 - 240 VAC)
- > 2 highly-accurate temperature measurement inputs for connection with PT100, PT500 or PT1000
- > Smart phone world with an Android App for commissioning and readout locally
- > NFC and Bluetooth interface for remote commissioning
- > Metrological approval in accordance with 2014/32/EU (MID) and PTB K7.2 (cold, heat/cold combined)
- > Datalogger freely programmable with 500 values

**Various  
communications  
interfaces  
available**



## Optimizing commissioning cost with enhanced usability

- > Programming and read-out with Android Smart Phone App or Windows Software Tool
- > Datalogger features for deep analysis and diagnostics
- > "IMP EBS" Option for on-site calibration settings for easier installation
- > Optimized display and backlight with improved button usability
- > NFC and Bluetooth interface for easy commissioning

# 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 applica-

-tions 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.



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



Optimized display and backlight and improved button usability



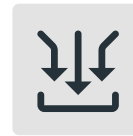
Appropriate for water and other heating or cooling media



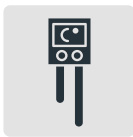
Modular concept for communication interface



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



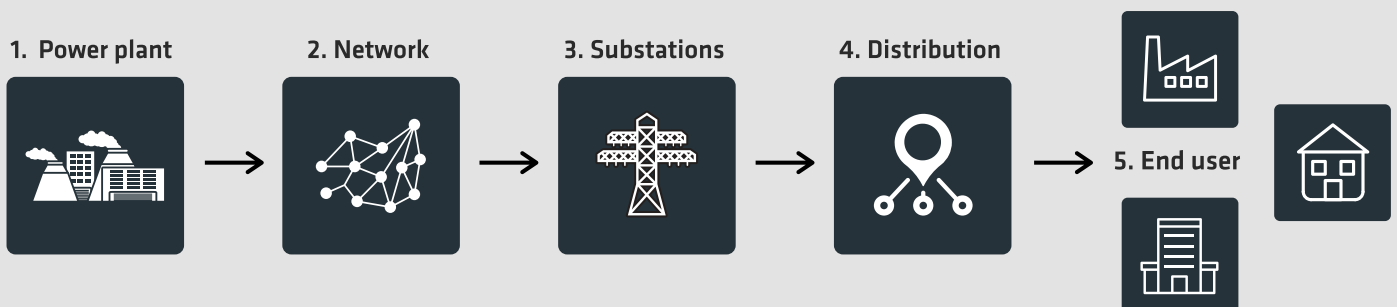
Metrological approval in accordance with 2014/32/EU (MID) and PTB K7.2 (cold, heat/cold combined)



Android App for commissioning and readout locally

# 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 / district cooling, residential construction/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
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	
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
Protocols on RS-485	M-Bus   BACnet MS/TP   Modbus RTU   N2Open	
Integrated Radio communication	wM-Bus / OMS4	
Supply range: 24 - 240 VAC	✓	X
Supply range: 110- 240 VAC	X	✓
Power supply output: 24V / 3,6W	X	1
Parameterisation interface	NFC   BLE	
Slots for optional functions modules	1	2
Optional modules	M-Bus   Modbus   BACnet   N2Open   LoRa (Wireless)   KNX LON TP/FT:10   2x Current-Output 0/4-20mA	

\*Additional

3-140-FL-EN-02 / Änderungen vorbehalten / Sous réserve de modifications /  
Modification rights reserved / Copyright © INTEGRA METERING AG