


CALMS AIR INC.

DATA SHEET CAL-KIT



CAL-KIT

is a comprehensive package designed for advanced data logging, leak detection, and system monitoring in compressors. With the free CALMS platform annual Basic subscription for five systems, users can monitor, analyze, and manage their systems in real-time, from anywhere, at any time. This kit provides a complete solution for data logging, real-time monitoring, and maintenance of compressor systems, thereby improving system efficiency and reducing energy waste.



BENEFITS

- A comprehensive all-in-one solution for compressor system monitoring;
- Comes with a data logger, multiple analog inputs, and sensors for broad leak detection;
- The CAL-EDGE-8 data logger is a key component;
- LTE 4G modem and Ethernet, ensures data is accessible in real-time, anywhere, anytime;
- Connection and extension cables included in the kit make installation and configuration straightforward;
- All components are safely stored and transported in a rugged Explorer case;
- Contributes to significant cost savings. By enabling prompt, precise repairs, it optimizes system performance and reduces energy waste;
- The kit's offerings are expanded with the addition of a free CALMS platform subscription.;
- Offers user-friendly tools for monitoring and controlling up to five systems;
- The CAL-KIT streamlines auditing. It packs vital components like the data logger and sensors in one kit, centralizing the process;
- Included is a CALMS platform subscription.

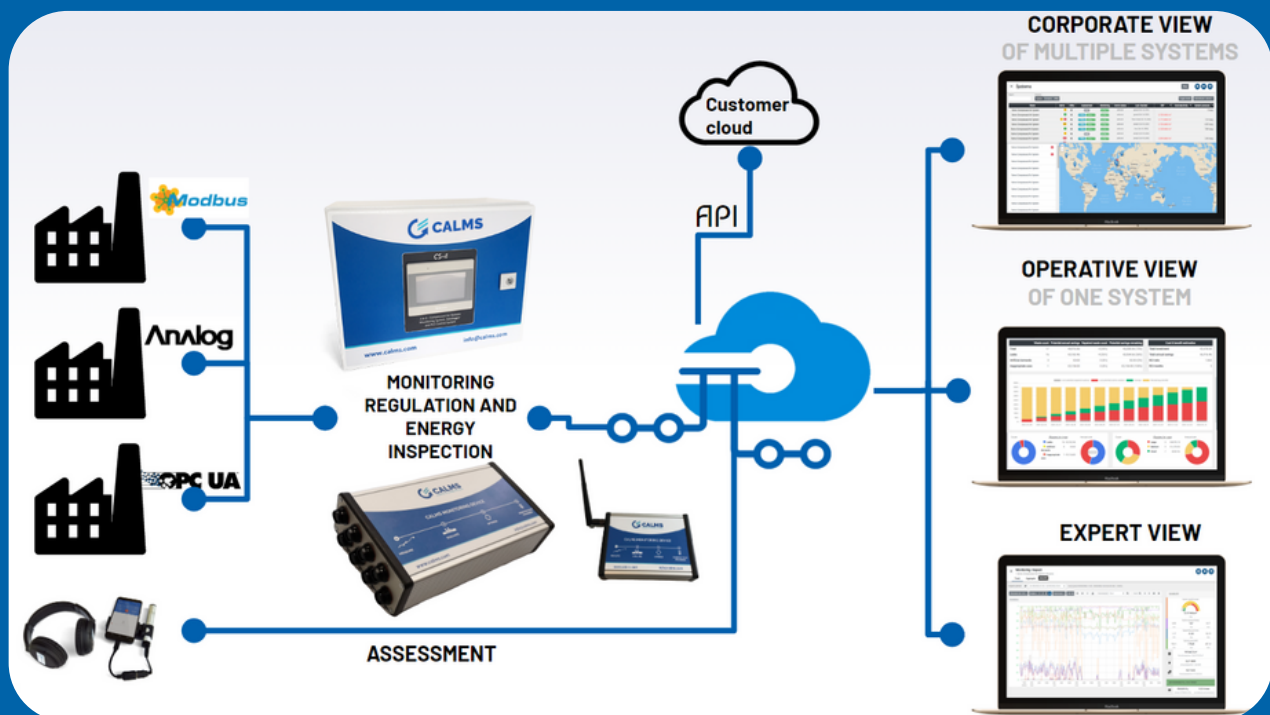


FEATURES

- Central to the kit is the CAL-EDGE-8 data logger;
- features wide-ranging connectivity options such as LTE 4G modem and Ethernet, ensuring swift data collection and remote access;
- Includes eight 4-20mA Analog Inputs which enable extensive data capture from various sensors;
- Contains a CALMS platform Basic subscription which extends monitoring capabilities to up to five systems;
- The CALMS platform offers a range of user-friendly tools. These enhance system monitoring, analysis, and control;
- Includes specialized tools Rogowski CTs for measuring current in compressors, crucial for system monitoring;
- Incorporates a pressure transmitter which offers precise pressure readings, vital for leak detection and system optimization;
- Connection cables come with the kit, facilitating easy setup and interconnection of system components;
- All components are safely stored in an Explorer case.
- Extension cables are included and ensure flexible sensor placement and allow system customization.

CALMS – PROCESS DIAGRAM

CAL-KIT includes: CAL-EDGE-8 data logger with LTE 4G modem, Ethernet, RS485 – Modbus RTU and TCP, 8 x Analog Inputs 4-20mA, explorer case, free CALMS platform annual Basic subscription for 5 systems, CT Rogowski Amps 4x compressor(4x CT RS 500A / 20mA) + Pressure transmitter(1x SML-10) with connection cables + 5x AI extension cables 10m + 3x AI open end short cable with connector for 4-20mA, (generic 4-20mA pasive/active sensor)



SPECIFICATIONS (CAL-EDGE-8):

Description		Remarks
Hardware	Quad core Cortex-A53 (ARM v7) 64-bit	
Processor Speed	SoC @ 1.5GHz	
RAM	1GB DDR2 RAM	
Protocol	MODBUS RTU, MODBUS TCP/IP, ADS, OPC UA, Database queries	Up to 20 sensors per one device
Interface	1x 10/100 Ethernet adapter	
Analog inputs 4...20mA	8	Passive or active connection with internal 24Vdc, 12bit resolution, with standard connectors
RS485	Standard: 1x	2-wire RS485
WEB Management	Yes	
Min logging interval	1 sec (configurable)	
CAL to CALMS web upload interval	1 sec to 24 h (configurable)	
Data Storage	eMMC 8 GB	
Cloud connection	Mobile 3G/4G / LAN	
Operating Range	0°C - 50°C (32 F - 131 F)	
Power supply	24VDC (power adapter included)	Recommended: 60W . Depends on sensor usage.
Cellular modem	LTE (LTE-M)	Depends on network coverage.
Antenna interface	Standard SMA interface-antenna included	
Size (mm)	H 56 x W 125 x L 250 mm	
Size (Inches)	H 2.20 x W 4.92 x L 9.84 inches	
Weight	865 g /1,91 lb	
Materials	Enclosure: Aluminum	
Mounting	DIN rail or wall mounting	
EMC	EN 61000-6-2/EN 61000-6-4	
IP rating	IP54	
Approvals	CE, UL	



SPECIFICATIONS (CT ROGOWSKI AMPS):

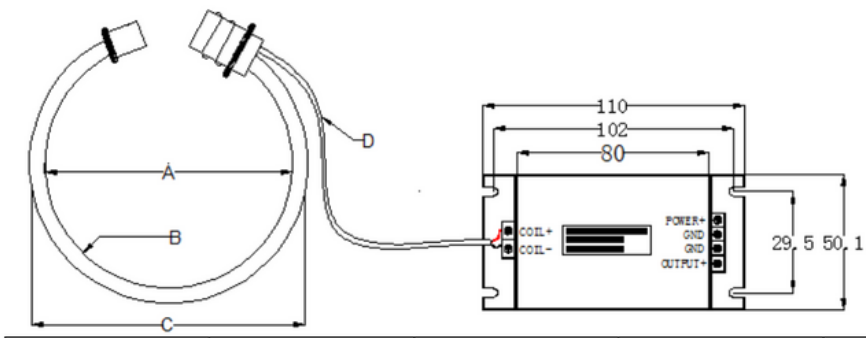
RSC Tseries Rogowski coil transducer (4-20mA) is designed according to the needs of the industry with a high precision, high security, low power consumption and other characteristics of the transducer. Can be used in various specifications of PLC, configuration software and other equipment connected. Widely used in metallurgy, electroplating and other fields.

ELECTRICAL DATA (TA=25°C±5°C)

Type					Remarks
Rated current	±500	±1000	±5000	±10000	A
Measure range	5% - 120%				%
Power frequency	45-60				Hz
Rated output	4 - 20				mAdc
Supply voltage	12				V
Power consumption	<35				mA
Accuracy	≤1				%
Linearity	≤1				%FS
Response time	≤20				ms
Galvanic isolation	AC,1min, 3				KV
Isolation resistance	@ DC 500V 1000				MΩ
Operating temperature	-25 to +70				°C
Storage temperature	-40 to +85				°C



MECHANICAL DIMENSION(FOR REFERENCE ONLY)



Type	A(mm)	B(mm)	C(mm)	D(m)
RSCT 500A	100	10.5	121	1
RSCT 1000A	100	10.5	121	1
RSCT 5000A	150	10.5	171	1
RSCT 10000A	300	10.5	321	1
RSCT xxxx	Custom made	10.5	Custom made	Custom made

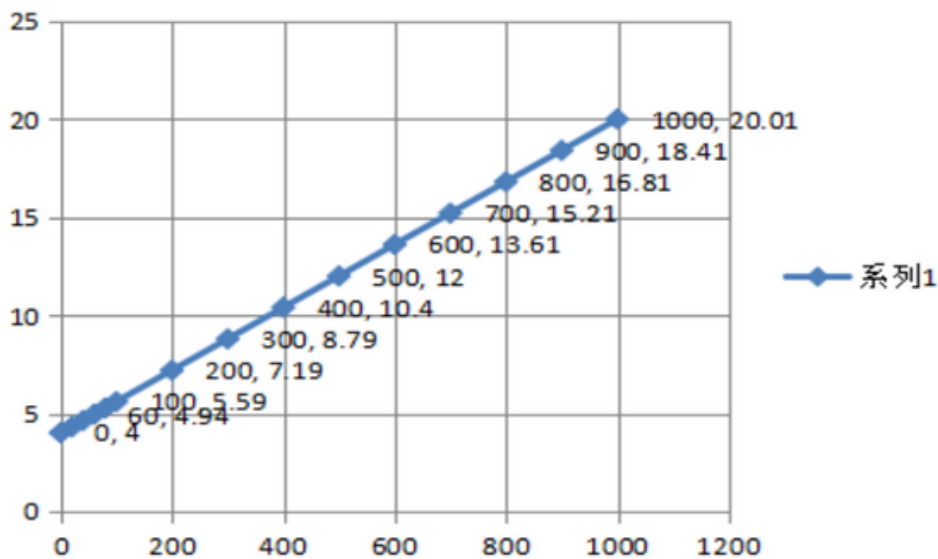
DIRECTIONS FOR USE

- There is no special requirement for the transducer to be a three wire transducer, the wiring should be connected according to the label instructions.
(Note: The false wiring may result in the damage to the transducer)
- Custom design in the different rated input current and the output transducer are available

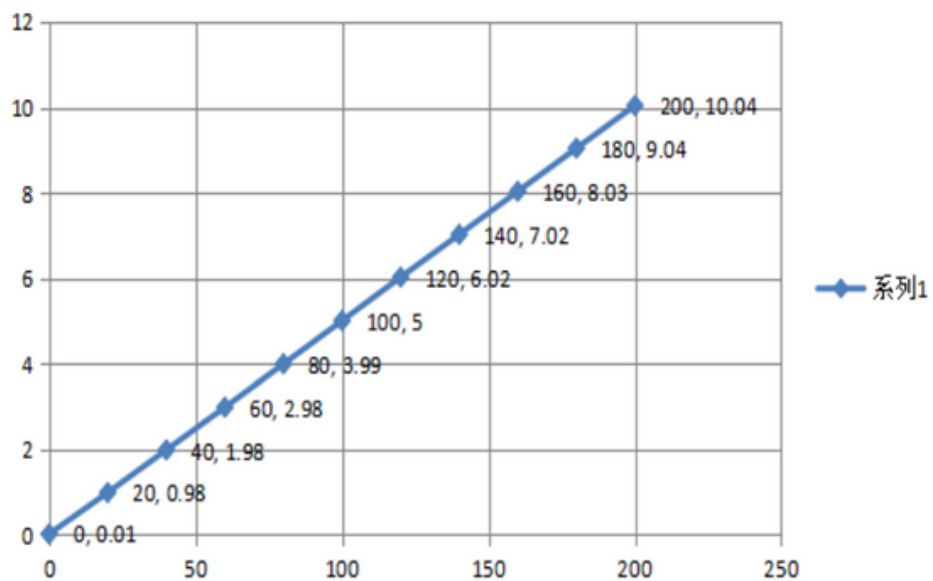


CHARACTERISTICS CHART

1000A/4-20mA_{dc}



200A/10V_{dc}



APPLICATIONS

- Variable drives
- configuration software
- Battery supplied applications
- PLC

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LET'S WORK TOGETHER

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