



ClimaCheck *online* monitoring hardware
Reduce energy cost and extend equipment life
of Air Conditioning & Refrigeration equipment



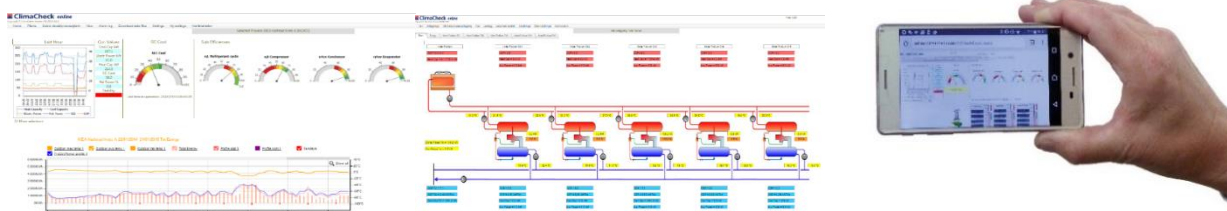
ClimaCheck PA Pro III Performance analyser - Turn-key for IoT

ClimaCheck is the world leader in performance analysing in the RAC industry. We supply solutions for portable and permanently installed performance analysing used for inspections, energy audits, preventive maintenance, trouble shooting and cloud based 24/7 monitoring. ClimaCheck online early warning capability for decreased efficiency or leaks is unique on the market. For capabilities of software and cloud based solutions please refer to separate documents

ClimaCheck has selected the most advanced, powerful and flexible IoT platform on the market for our new generation of performance analysers. They have integrated Penta Band modem, WiFi and ethernet communication. Data from all sensors are sent to local PC or to the cloud to analyse and visualise performance.




ClimaCheck Performance Analyser Pro for data collection: A permanent installation for standard systems includes two pressure transducers, eight temperature sensors and a power meter but all systems are supplied with sensors and configuration for the actual site to limit commissioning to validation of inputs. This is everything you need for continuous monitoring, E-mail and SMS alarm.

The information give the equipment owner energy data to benchmark his systems and the experts servicing and optimising the system all the details they need to compare with state of the art and manufacturers data.



Interfaces – import of measurements and export of analysed data

Interface to third party systems can be done either directly to ClimaCheck online servers or to the local ClimaCheck IoT module. Data from controls, BMS or energy monitoring systems can be transferred to ClimaCheck PA Pro III with modbus to exchange inputs and/or analysed data with other systems. Please contact ClimaCheck for information on integration.

Technical Specification PA Pro III Performance analyser		
Graphical display with touchscreen, Graphical 240x160 pixels White-on-Blue display, Digitized audio		
Penta-band cellular modem, UMTS/HSPA		
Inputs on main board:	4 x Analogue (0...10V or 4...20mA) Accuracy +/- 0.5% FS	
Inputs digital	8 x Digital	
Output digital	8 x high-power solid-state digital	
Communication	Ethernet, WiFi, RS485x2, RS232x2, USB, Bluetooth classic/LE, CAN2.0B	
Analogue input module modbus	8 x inputs configurable Pt1000, 0-10 V, 4-20 mA, Accuracy: Temperature input± 0.25°C, Analogue ±0.1% FS	
1-wire bus	Temperature sensors -25 to 150°C (Accuracy -20 to 80°C +/-0.5K)	
Memory	SD-card	
Supply voltage	24 VDC, 15 W, transformer included in standard housing	
Dimensions LxBxH	Standard housing 3 row, 12 modules, HxWxD 500x285x136	
100 962 (100 961 with EM24 power meter max 830VLL)		Complete ClimaCheck PA PRO FIII 100 A max 400VLL with integrated modem. Including software, cables and mounting kit. Including the following sensors: 8 x Pt1000 temperature sensors 2 x pressure sensors standard 10 and 35 Bar(g) 1 x 3 phase power meter EP Pro EM210 with 3 x Current Clamp-on 1 – 120 A opening 15 mm
100 902		ClimaCheck PA PRO III IoT module DIN mounting with integrated penta-band modem, 2xmodbus, WiFi, LAN, Bluetooth. 4 Analogue inputs, 8xDigital in, 8xDigital out (see specification)
500602		ClimaCheck I/O module R560 for expansion 8 x inputs configurable Pt1000, 0-10 V, 4-20 mA, Accuracy: Temperature input± 0.25°C, Analogue ±0.25% FS Size (LxWxH): 71x 91x58 mm, recommended wiring 0.14-1.5 mm
Example of common accessories (ask for more according to application):		Part No.
Power meters for i.e. 2 circuit/stage systems or auxiliary		
EP Pro EM210 - extra power meter <400VLL, 4 DIN modules (71,7 mm)		100 541
EP Pro EM24 - extra power meter <830VLL, 4 DIN modules (71,6 mm)		100 512
Clamp on current measurements for EM210		Specify Amp
Current transformers fixed for EM24 specify required amps 100/250/400/1000 A		Specify Amp
Rogowski coils for current measurements for EM210, 400/600/900 mm		Spec. Amp/length
Pressure sensors for i.e. extra circuits, multistage		
Pressure Sensor -0.7 – 5 Bar(g) Typical use is for R123 chillers		200 140
Pressure Sensor 0 – 10 Bar(g) standard low pressure		200 141
Pressure Sensor 0 - 35 Bar(g) standard high pressure		200 142
Pressure Sensor 0 - 50 bar (g) typical use R410A and MP for CO2		200 143
Pressure Sensor 0 - 150 bar (g) typical use HP for CO2		200 144
Temperature sensors – common types more available on request		
Temperature sensor for surface mounting 5 m, free leads		300 200
Temperature sensor for surface mounting 10 m, free leads		300 220
Temperature sensor 3 mmx 150 mm binder probe (for test plug), 10 m, free leads		300 501
1-wire sensor, 3 m drop cable, free leads		300 202
Extension 1-wire XX m with connection box and terminals to YY * 1-wire sensors		Specify length/no.

Know the performance – maximise the efficiency.

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