

ClimaCheck *onsite* - Hardware

Comply with the increasing focus of energy efficiency in Air Conditioning, Refrigeration and Heat Pump systems.

ClimaCheck is the world leader in performance analysing in the HVACR industry. We have supplied portable and fixed installations to the last 20 years. Today the equipment is used for inspections, energy audits, predictive maintenance, troubleshooting, automated fault detection and diagnostics (AFDD) and 24/7 cloud based monitoring. The early warning capability catch everything from decreased efficiency to refrigerant leaks and is unique on the market.

We have selected the most advanced, powerful and flexible IoT platform on the market for our performance analysers. They have built in 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 analysis is used by manufacturers of components, refrigerants and refrigerant systems as well as consultants and service companies to ensure high performance in Air Conditioning, Refrigeration and Heat Pump plants.

Tens of thousands of field measurements and thousands of online measurements with ClimaCheck prove that high rating does not ensure efficient operation in a plant. **20-30% of the energy can be saved** in most plants through re-commissioning. We can also conclude that most failures can be avoided if faults are identified early.

As 20% of global electricity is used by the refrigeration processes – this is a huge saving potential – getting more in focus by authorities, utilities and users every day.

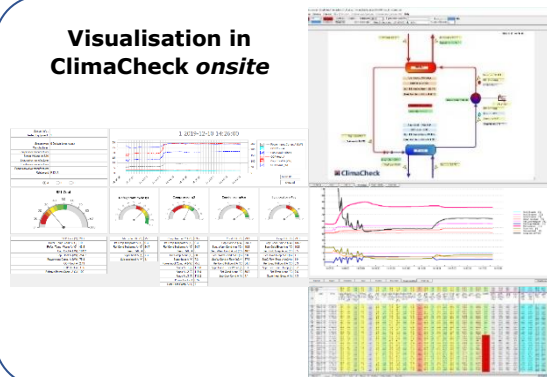
The **ClimaCheck *onsite* - PA Pro III** is a turn-key portable analyser supplied with all required sensor for a standard refrigeration process. ClimaCheck *onsite* software is included, and it can be connected to ClimaCheck *online* cloud servers by inserting a SIM card or through LAN/WiFi.

State of the art technology make the ClimaCheck PA Pro III a flexible platform ready for the future. Modbus allows cost-effective expansion for complex system and integration with third party sensors/controllers. ClimaCheck can customise systems at request and all systems can easily be updated when needed as they are modular and configurable. Updates and configuration can be done over internet to give flexibility and facilitates remote support.

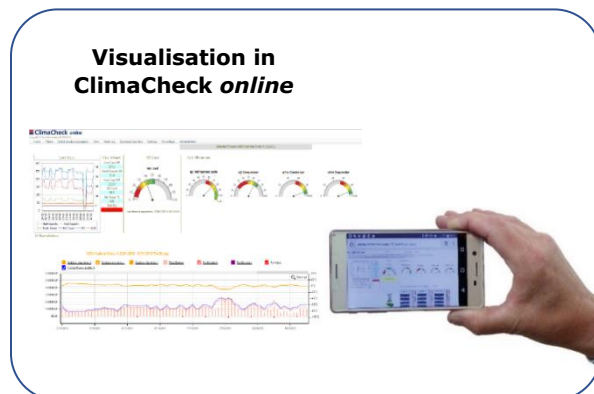
“To measure is to know”



Visualisation in ClimaCheck *onsite*



Visualisation in ClimaCheck *online*



ClimaCheck Sweden AB




Know the performance – maximise the efficiency

Phone: +46(0)76-005 03 00

E-mail: info@climacheck.com

www.climacheck.com

Technical Specification ClimaCheck onsite – hardware 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 (wired to front)
Output digital	8 x high-power solid-state digital (2 wired to front)
Communication	Ethernet, WiFi, RS485x2, RS232x2, USB, Bluetooth classic/LE, CAN2.0B
Analogue input Modbus module	8 x inputs configurable Pt1000, 0-10 V, 4-20 mA, 20-1600 Ω, 20-5000 Ω Accuracy: Temperature input ±0.25°C, Analogue ±0.1% FS, Resistance ±1Ω
1-wire bus	Temperature sensors -25 to 150°C (Accuracy -10 to 80°C ±0.5K)
Memory	SD-card
Supply voltage	24 VDC, 10 W, 24 W plug-in transformer included
Dimensions / Weight	501 x 279 x 193 mm /11 kg

100 222		Complete ClimaCheck PA PRO III <150 A with integrated modem. Including software, cables, mounting kit and 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 Scout with 3 x Current Clamps 0.5 -150A (hole diameter 25 mm/1")
100 232		Complete ClimaCheck PA PRO III <4000 A with integrated modem. Including the equipment and sensors as above but current clamps replaced with "rope type" CT: 3 x Rogowski coils 5 - 4000 A , (length 40 cm, 16")
900 168		Spare Part Case Attaches to PA Pro carry-on case retractable handle, Protective insulation in lid and bottom

Example of common accessories (request complete list):	Part No.
EP Scout - extra power meter for 2 circuit or cascade/booster systems	100 461
Clamp on, current transformer 0.5 - 150 A	400 610
Rogowski coils, current transformer 5 - 4000A	400 710
Magnet touch voltage probes, colour coded according to local market (specify colours)	400 26X
Pressure Sensor -0.7 - 5 Bar(g) typical use is for R123 chillers	200 140
Pressure Sensor 0 - 10 Bar(g)	200 141
Pressure Sensor 0 - 35 Bar(g)	200 142
Pressure Sensor 0 - 50 bar (g) typical use is for R410A and MP on CO2	200 143
Pressure Sensor 0 - 150 bar (g) typical use is for HP on CO2	200 144
Expansion Module, eight temperature or analogue inputs configurable	500 603
Temperature sensor Pt1000, 5 m, 3.5 mm male plug	300 100
Temperature sensor Pt1000, 10 m, 3.5 mm male plug	300 225
Temperature sensor 1-wire, 3 m cable, 3.5 mm male plug	300 701
Extension 1-wire 10 m with one male 3.5 mm "plug" to 3 female	300 115