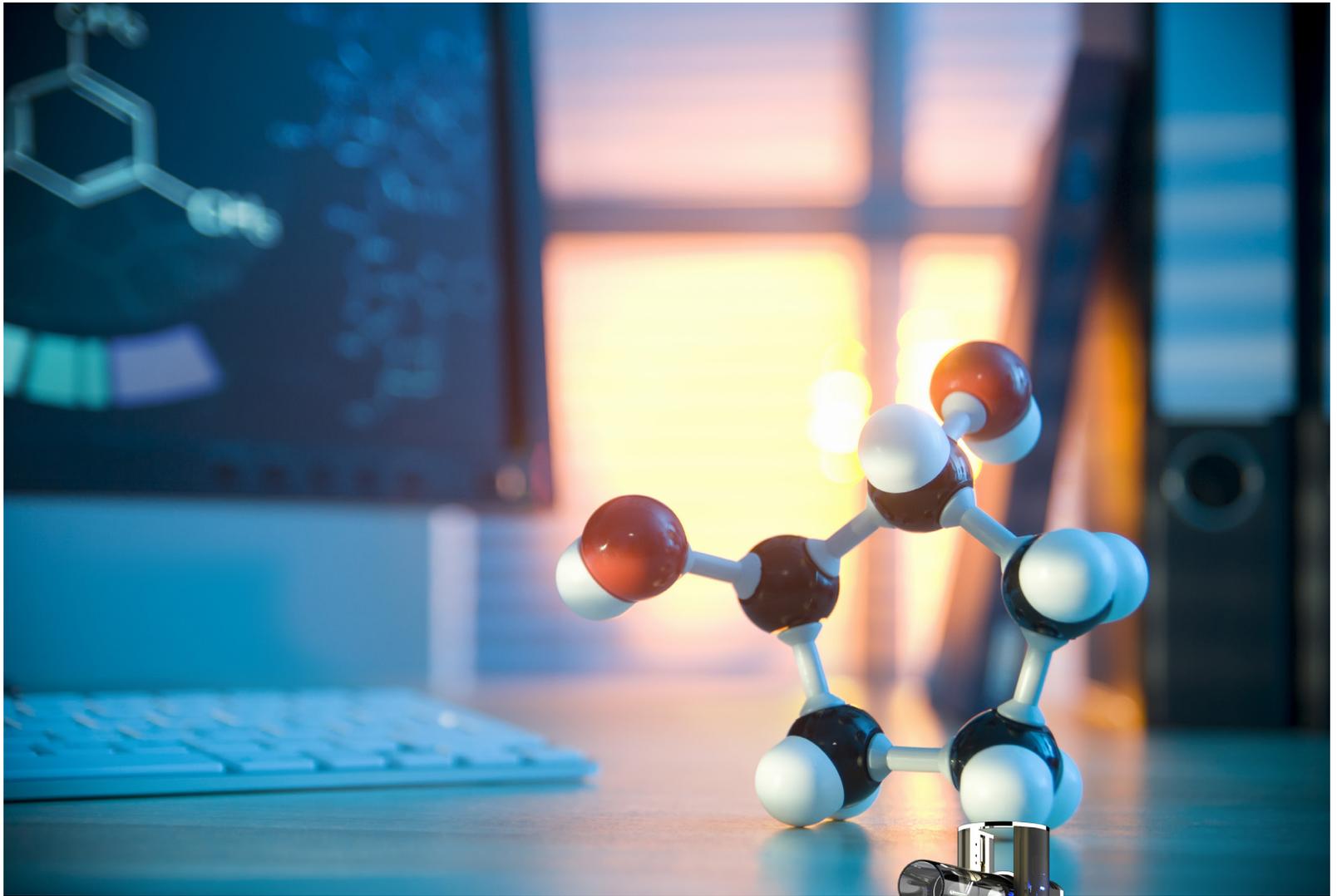


ORBIS BV

Innovation in cold behavior

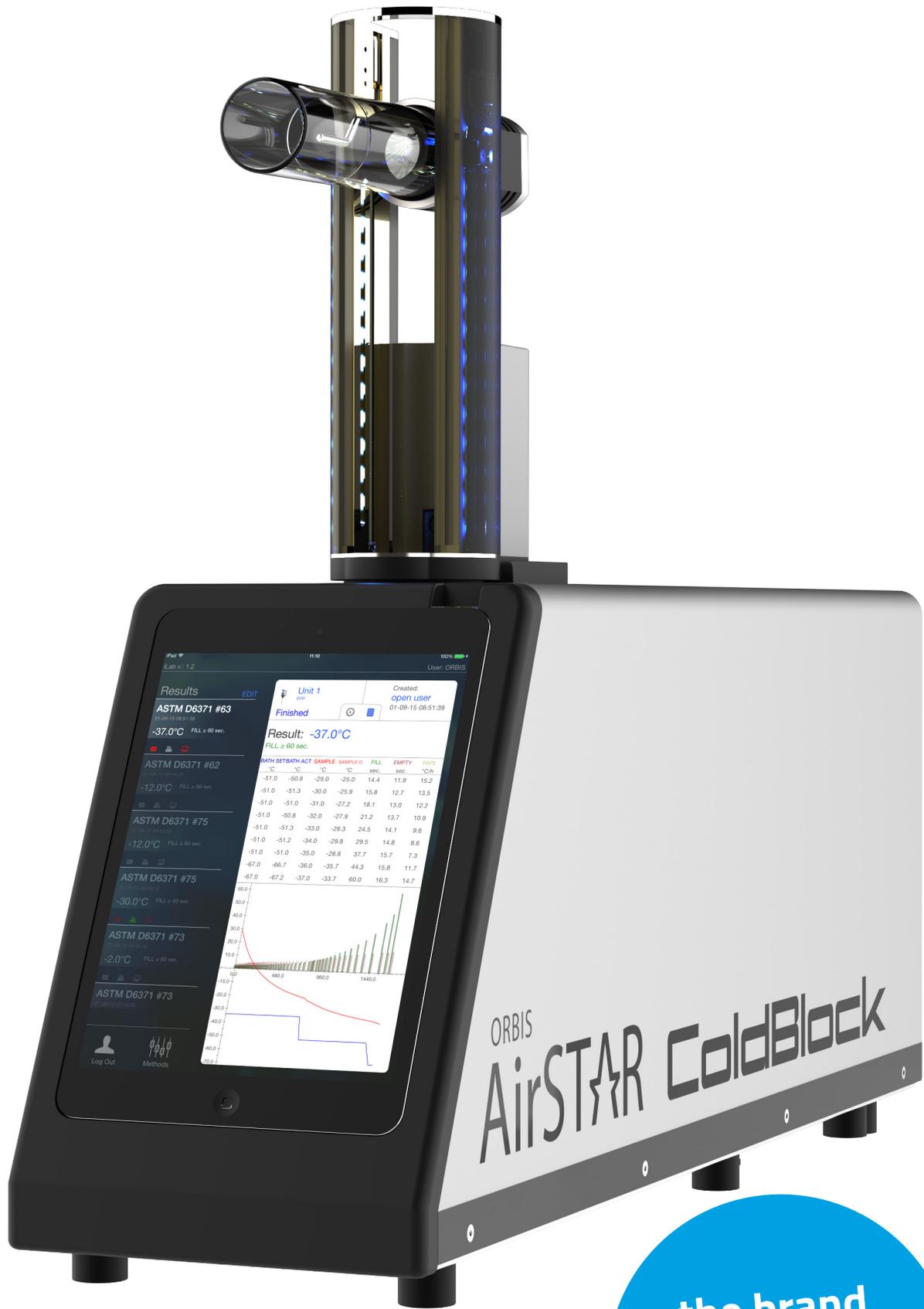


ORBIS AirSTAR CPPP

Cloud and Pour Point testing

by Orbis BV





the brand
new way of
CPPP testing



About AirSTAR CPPP Analyzer

Cooling. The ColdBlock integrated cooling unit is friendly to environment, people and maintenance department. With the capacity to cool down to -105°C , no external chillers are required. ColdBlock is completely liquid-free.

Concept. AirSTAR CPPP is modular: ColdBlock and CPPP Head are modules that can be combined and used independently from one another. Imagine for instance two ColdBlocks and three CPPP Heads, where one Head is always clean and ready for start on either one of the two ColdBlocks.

Innovation. AirSTAR CPPP is full of innovative technology that makes CPPP testing easier, faster, and more reliable. One example is the cable-free design. Users simply take out the CPPP Head from the ColdBlock and put it in the optional Docking station, and vice versa. All without having to (dis)connect any cables or hoses.

Results. AirSTAR CPPP strictly conforms to applicable ASTM, EN, IP and JIS methods, and results are reliable and precise. Results are stored on the iPad and printed on almost any printer. Other options: connect to Windows PC, send to LIMS and/or email results directly from the iPad.



CPPP Analyzer

The AirSTAR CPPP Analyzer includes:

- AirSTAR ColdBlock cooling unit + iPad mini
- AirSTAR CPPP Head
- Required consumables (glassware, temp probe, etc)
- *Optional: Docking station*



Docking station

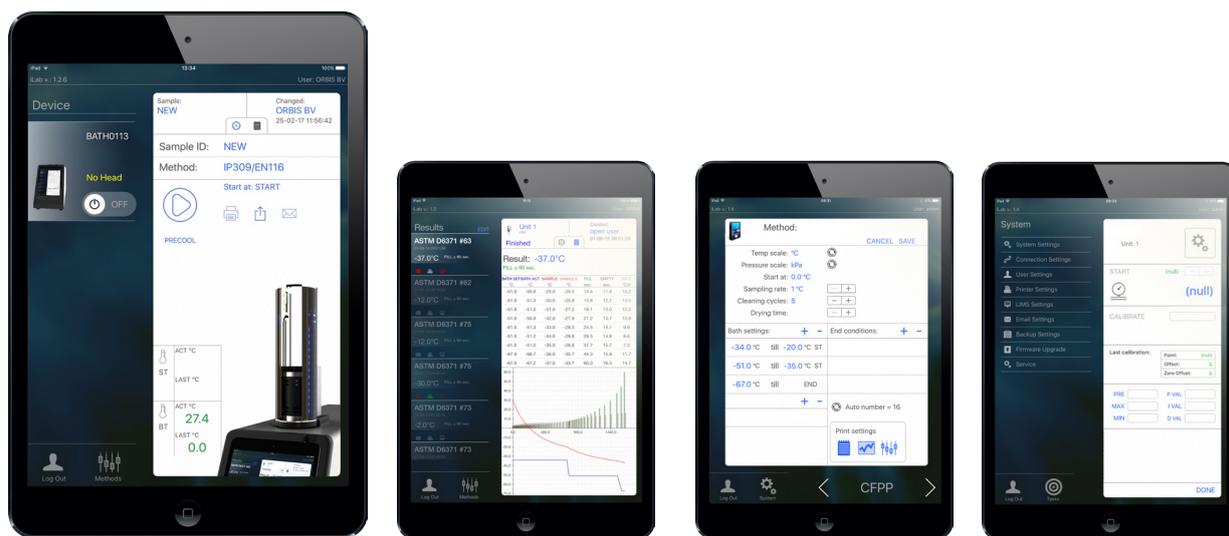


CPPP Head

CPPP Head features:

- One Head for both cloud point and pour point testing
- High resolution camera for accurate detection of cloud point and pour point
- Integrated microprocessor-controlled mechanism for lifting and tilting the jar
- Powercast® technology for wireless power to CPPP Head
- PT-100 with easy click-connection, built-in storage for calibration data & unique ID
- Easy assembling

What is CPPP? Cloud Point is the temperature at which a cooled sample first shows a cloudy appearance because of wax forming, measured under conditions described in the methods ASTM D2500 and D5773 and related methods. Pour Point is the temperature at which a cooled sample first becomes semi solid and loses its flow characteristics, measured under conditions described in the methods D97 and D6892 and related methods.



Screenshots do not represent actual CPPP application layout

The AirSTAR CPPP software application is designed for easy & flexible control. It offers extensive options for data recording and display, and many options to customize programs. Test results and progress animation are displayed real-time.

Features:

- Create linear and stepped cooling profiles
- Simultaneous CP and PP testing possible
- Programmable warm-up of cooling bath before and after test
- Specify end-test conditions in program
- Monitor and record sample cooling rate data
- Define "Start at" temperature for each test
- Multiple users with variable access rights can be created by the administrator
- Connect multiple CPPP Heads to one ColdBlock
- Extensive storage capacity for results, programs, settings, user information and more (16Gb iPad)
- Connect with PC (Windows operated systems) for exchanging results and settings via FTP
- Data handling options such as: send results in XML to LIMS, make and email PDF
- Printing options such as: print PDF via AirPrint and Direct Printing on connected Kiosk printer
- Extensive options to calibrate bath jacket, PT-100 probe and electronics

	AirSTAR CPPP Analyzer
Methods	Cloud point: ASTM D2500, D5771, EN 219, ISO 3015, JIS K2269 Pour Point: ASTM D97, D5853, D6892, EN 15, ISO 3016, JIS K2269m, Chinese GB/T3535
Sample CP & PP detection	High definition camera
Calibration	Extensive calibration routines for sample + bath jacket temperature Temperature probe offset table. Programmable frequency of calibration notifications
Temperature range:	+65°C down to -105°C (-175°F to 95°F)
Lift mechanism	Microprocessor controlled stepper motor
Test Settings	Test can be started at programmable temperatures. Option for customized time and detection intervals.
Cooling profiles	Stepped and linear cooling profiles customizable (from 1 to 60°C/h). Unlimited storage capacity.
Temperature Measurement	°C or °F; PT 100 class A probe, automatic probe ID detection with built-in calibration data storage. Calibration certificate standard supplied.
Voltage	100–240 VAC, 50/60 Hz
Power	150 W
Dimensions	16cm x 59cm x 49cm (W x D x H)
Weight	25 kg



ALSO AVAILABLE **AIRSTAR CPPP AUTOMATOR**

FOR USE ON EXISTING (MANUAL) COOLING BATHS



Unique!
Keep your manual
cooling bath and
automate your
CPPP test!

The Automator includes:

- AirSTAR CPPP Head
- Apple iPad mini
- Apple iPad mini docking station
- No cooling unit included!

The Automator is a fully automatic self-contained CPPP tester, and can be used in combination with existing CPPP and CFPP cooling baths. When the sample temperature reaches the method-defined temperature at which the sample jar is to be put into the next temperature bath jacket, lights will

flash and signals will sound.

Up to 8 Heads can be controlled simultaneously within 1 AirSTAR CPPP Automator configuration. A CPPP Head can either be powered wirelessly or with the supplied power adapter.



INTERESTED IN A QUOTE OR LIVE DEMONSTRATION?

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and also check out
our **PAMv2***
*automatic distillation for
ASTM D86



ORBIS BV

Innovation in cold behavior

About ORBIS BV:

Our expertise in equipment for testing physical properties of petroleum products originated in the 1970's. ORBIS BV was founded in 1999.

Our mission:

Making petroleum analyzers that save customers time and money, while producing highly precise, accurate and method-according test results.

Our passion:

Using technology's latest innovations to make our instruments reliable, smart and easy to use, while maximizing performance and efficiency. And all that within a slim design.

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