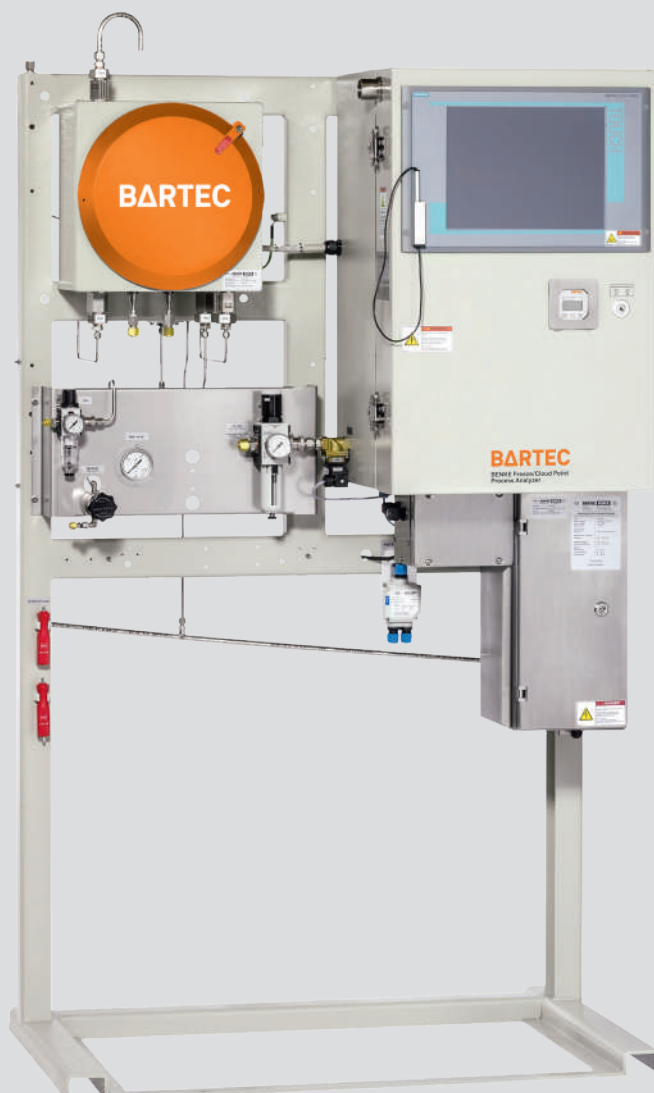


# Freeze/Cloud Point Process Analyzer FRP-4/CPA-4

Credible Solutions for the Oil and Gas Industry



# Freeze/Cloud Point Process Analyzer FRP-4/CPA-4

To remain competitive, today's refiners must employ all optimization and product control techniques available. The use of online physical property analyzers is one of the key features to reach those objectives because they measure directly important quality properties in the process.

The freeze point as well as the cloud point are both important cold properties which need to be monitored by operators. A matter of fact is that cloud point and freeze point can be detected with one analyzer as the principle of detection is identical. The difference between the two properties is defined by the actual sample behavior. The sample e.g. gasoil is cooled down and below a certain limit small crystals start to appear, which results in a certain degree of cloudiness of the sample. At that point the so called Cloud Point temperature is determined via reduction of light intensity through an optical path.

The cooling process is stopped and the crystals dissolve again. At that point the sample becomes clear and transparent again. As soon as all crystals have dissolved the so called Freeze Point temperature has been reached.

## Application

These cold properties are important also for the aviation industry, hence jet fuels and other aviation gasolines to avoid filter clogging or irregular combustion characteristics during operation of turbines. The same applies also to mainly gasoils and diesel products.

- ASTM compliant optical measurement
- Suitable to also measure cloud point temperature
- Typically no chiller required for cloud point applications
- Network and fieldbus communication



## Special Features

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Rugged design of measuring cell

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Optimized assembly – easy removal of complete cell

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Available communication interfaces:

- Modbus /RTU, Modbus/TCP (bidirectional)
  - Remote access via Ethernet (VDSL or FOC is)
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Integrated failure diagnosis and self-monitoring

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Validation report for quality assurance

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Freely programmable digital and analog inputs

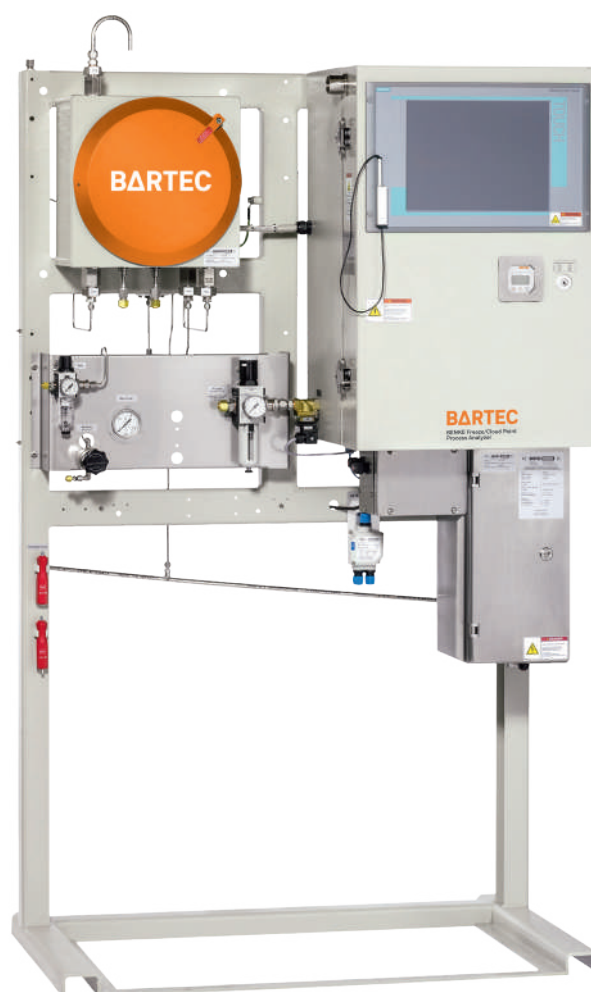
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## Norms and standards

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Compliant with:

- ASTM D2386
  - ASTM D2500
  - ASTM D1015
  - DIN ISO 3013
  - IP 16
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**Make your decision for a strong partner!**  
**Choose BARTEC also for:**

- Fast Loop Systems
- Sample Conditioning Systems
- Validation Systems
- Recovery Systems
- Chillers
- Air Conditioning Systems/HVAC
- Pre Commissioned Analyzer Shelters/Turn-Key Solutions



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