



# Process Analyzer

## Salt in Crude Analyzer Model P-600

Credible Solutions for the Oil and Gas Industry

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# Process Analyzer

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 important quality properties in the process directly.

Salt in crude is the amount of chloride based salts found in the sample in weight per volume.



Your partner  
for innovative  
system solutions.



The BARTEC specialists have many years of experience. They create system solutions that you can rely on: efficient and dependable for decades to come.

**Variable measurement ranges of up to 0-400 PTB (0-1000 mg/L)**

**Rapid analysis cycle of 6 minutes**

**Superior repeatability of 2% of scale**

**Reliability better than 99% uptime**

**Micro sample analysis reduces solvent consumption**

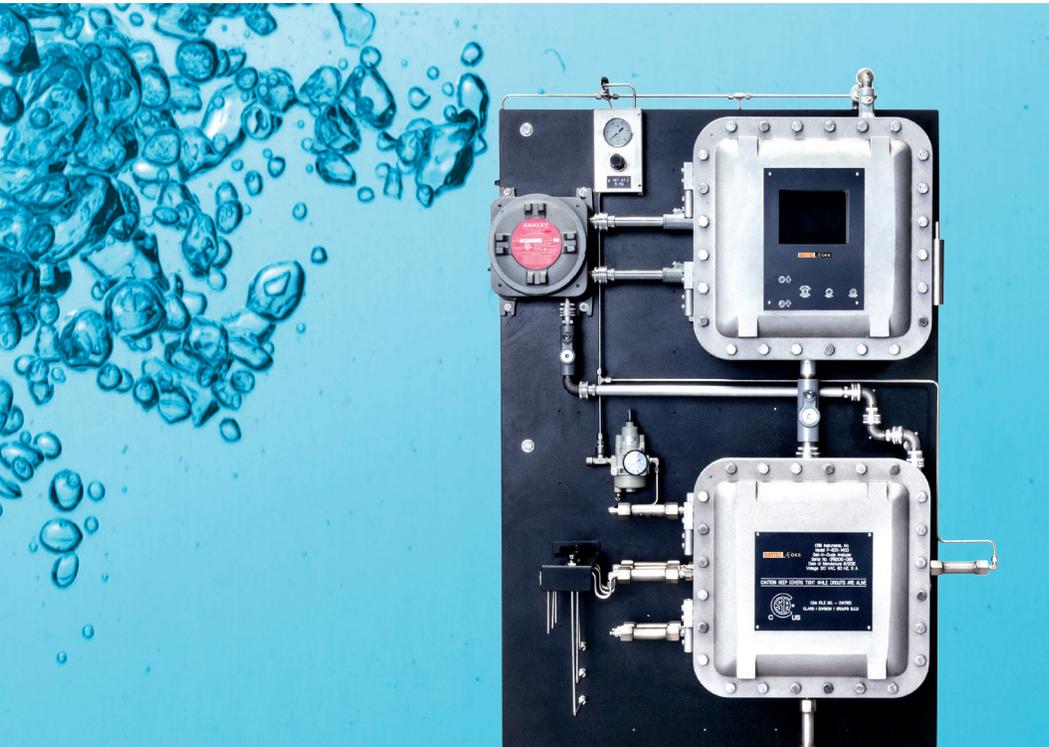
**Precise bi-directional cell temperature control**

**Incorporated rinse/flush system**

**Remote diagnostics over IP**

## APPLICATION

In certain areas of the world, crude oils with high level of salts exist. This crude oil must still be transported and refined and the high levels of salt pose problems if left untreated. De-Salting technology is well established but to be utilized effectively the need for quick and accurate measurements of the level of salt concentration is necessary. The immediate response of an on-line analyzer allows the operator to use De-Salters as efficiently as possible.

**Special Features:**

- **Micro samples**
- **Low solvent consumption**
- **Cell temperature control**
- **Enclosed solvent tanks**
- **Fully automatic**
- **Local interface**
- **Supports Modbus**
- **Remote stand by option**

**Norms and Standards:****Correlates with:**

- **ASTM D3230**

Make your decision for a strong partner!

Choose **BARTEC GROUP** also for:

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



## EXPLOSION PROTECTION

**Ex protection marking** ATEX: Zone 1 II B + H2 T6  
CSA/CUS Class I Div 1 Group B, C + D  
CE<sup>0518</sup>

## TECHNICAL DATA

**Technology** chemical mixing  
**Method** correlates with:  
ASTM D3230

**Measuring range** 0 to 400 PTB (0 to 1000 mg/L)  
**Repeatability** 2 % of scale  
**Reproducibility** ± 1 % of scale  
**Measuring cycle** 6 min typical  
**Measuring temperature** programmable,  
typical 50°C (122°F)

■ **Electrical data**  
**Nominal voltage** 110 or 220 VAC, 1 phase; 50/60 Hz  
**Maximum power consumption** 600 W

■ **Protection class** IP 65

■ **Ambient conditions**  
**Ambient temperature** operation 5 to 40°C (41 to 104°F)  
**Ambient humidity** up to 90 %

**Sample**  
**Quality** filtered 100 µm,  
without water

**Properties**  
**Consumption** 3.0 to 6.0 l/h  
**Pressure at inlet** 2 to 10 bar (29 to 145 psi)  
**Temperature at inlet** 10 to 60°C (50 to 140°F)

**Utilities**  
■ **Instrument air**  
**Consumption** less than 60 l/h  
**Pressure at inlet** 4 to 8 bar (58 to 116 psi)  
**Quality** clean dry,  
instrument air

■ **Coolant** Not required

## Signal outputs and inputs

**Analog outputs** 1 standard, 1 optional  
**Digital outputs** 3 dry contacts programmable  
**Digital inputs** up to 4 dry contact inputs, (customer alarm, remote standby, stream switch, validation request)

## Electrical data of signal outputs and inputs

**Analog outputs** up to 2 to 4-20 mA self powered and isolated, 1 is standard  
**Analog inputs** None required  
**Digital outputs** up to 3 dry contacts programmable, alarm critical, come read, alarm warning  
**Digital inputs** up to 4 dry contact inputs, (customer alarm, remote standby, stream switch, validation request)

## User interfaces

**Display** 7" color graphics  
**Keyboard** 5 button magnetic,  
no hot work permit required

## Connections

**Sample inlet** 1/4" FNPT  
**Sample outlet** 1/4" FNPT  
**Vent/Drain** 1/4" FNPT

## Weight and dimensions

**Weight** 228 kg (500 lbs)  
**Dimensions (W x H x D)** 940 x 1803 x 762 mm  
(37" x 71" x 30" in)

## Optional interfaces

**Analog outputs** optional, conductivity, cell temperature  
**MODBUS interface** TCP/FP or Serial/RTU MODBUS output available

**Important notice** P-600 is subject to continuous product improvement, specifications are preliminary and may be subject to change without notice. If your technical data do not comply with existing data, please contact us for technical clarification.

BARTEC GROUP

protects people and

the environment

by the safety

of components,

systems and plants.



- **Flash Point Analyzer Model P-500**
- **Salt In Crude Analyzer Model P-600**
- **Reid Vapor Pressure Analyzer Model P-700**
- **Freeze Point Analyzer Model P-800LT, Low Temperature**
- **Cloud Point Analyzer Model P-820LT, Low Temperature**
- **No Flow Point Analyzer Model P-840/P-840LT**
- **Viscosity Analyzer Model P-900**
- **Viscosity Index Analyzer Model P-950**
- **UV Oil In Water Analyzer Model W-800**