

Eliminate the guess work and high costs associated with time consuming lab verification of your on-line analyzer - our module for performance verification minimizes calibration frequency with confidence within minutes.

## Thermo Scientific Orion

### 2100 Series Grab Sampler and FAST QC™ Module



#### Markets

- Power
- Pulp and paper
- Chemical/petrochemical

#### Applications

- Quality control
- Quality assurance
- Measurement validation and verification
- Grab sample analysis

#### Grab Sampler and FAST QC Module

The new Thermo Scientific Orion 2100 series grab sampler and FAST QC module provides rapid analysis of analyzer performance with an easy-to-use method. Validate the accuracy of an online analyzer in minutes to ensure optimum performance and response.

Offered as an integrated component of the 2100 series analyzers or as a field upgrade enhancement, the grab sampler and FAST QC module allows maximum flexibility to fit your plant's instrumentation requirements.

Understanding the time and resource constraints for efficient plant operation—the 2100 series calibration and validation process eliminates the need for time consuming laboratory grab sample analysis.

#### Features

- Offered as integrated module on 2100 series analyzers from the factory or as a field upgradable module at your location
- Rapid delivery of a known standard to verify measurement accuracy—reduces the frequency of time consuming calibrations
- Reaches stability in less than 10 minutes, the system has you back online with confidence



### Thermo Scientific Orion 2100 Series Grab Sampler and FAST QC™ Module

- **Global support** – with experience that comes from supporting our online customers for over 35 years throughout the world, our water quality specialists and customer support teams offer a quick, thorough and professional response to any problem.
- **Focus on user benefits** – we work closely with you to define your needs, and ensure you are using the analyzer in a way that improves your bottom line.

#### Specifications

|                                 |   |
|---------------------------------|---|
| <b>Volume</b>                   | 1000 mL   |
| <b>Grab Sample Consumption</b>  | 500 mL in 10 minutes with an analyzer flow rate of 40 mL/minute |
| <b>Detection Limits</b>         | 5 ppb (21GRABLL)<br>10 ppb (21GRABXP)                           |
| <b>Response Time</b>            | 90% of final reading within 5 minutes after calibration         |
| <b>Compatibility</b>            | 2100 series analyzers only*                                     |
| <b>Electrical Requirements</b>  | 9 VDC, 1 A  |
| <b>Input</b>                    | 115 VAC / 60 Hz adapter,<br>230 VAC / 50 Hz adapter             |
| <b>Dimensions<br/>H x W x D</b> | 12.7 cm x 48.3 cm x 34.3 cm<br>(5 inch x 19 inch x 13.5 inch)   |
| <b>Weight</b>                   | 3.6 kg (8 pounds)   |
| <b>Temperature</b>              | 5 to 45 °C  |
| <b>Approvals</b>                | CE, CSA, FCC Class A limits                                     |

\* Not currently available for use with 2109XP, 2109XPEN, 2118XP or 2118XPEN analyzers

#### Flexibility for Your Convenience

The 2100 series grab sampler and FAST QC module is offered as integrated component on 2100 series analyzers or as a field upgradable module.

For more information, contact your local water quality specialists, call 1-800-225-1480 or visit

[www.thermo.com/processwater](http://www.thermo.com/processwater).



| Cat. No.        | Description  |
|-----------------|--|
| <b>21GRABXP</b> | Grab sampler / FAST QC™ upgrade module to fit existing 2111XP, 2111XPEN, 2110XP, 2110XPEN, 2117HL, 2117HLEN, 2117XP, 2117XPEN, 2120XP and 2120XPEN analyzers |
| <b>21GRABLL</b> | Low level sodium grab sampler / FAST QC upgrade module to fit existing 2111LL and 2111LLEN analyzers   |
| <b>21GRBT</b>   | Replacement bottle for 2100 series grab sampler  |
| <b>21GRPA</b>   | Air pump replacement kit for 2100 series grab sampler  |
| <b>21GRFK</b>   | Fittings kit for 2100 series grab sampler  |

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