CMET Software for Inline Process Control

The CMET Process Software is the link between Bruker's outstanding FT-NIR process analyzer and the customers Distributed Control System (DCS). Commands given by the DCS are transferred to CMET which in return starts a specific measurement and transmits the data back to the DCS for visualization and archiving.

- Intuitive and Modular Concept
- Setup and Runtime Environment
- Watchdog and Automatic Start
- Supports standard communication protocols
- OPC Client and Server Functionality
- Logfiles and Trendchart
- Statistical Evaluations of Process Data
- Different Trigger Modes

Various industrial markets are driven to maintain their competitiveness and economic success. From the ecological standpoint this can be achieved by improving the resource and production efficiency.

Inline FT-NIR spectroscopy is a powerful tool to do just that. For decades FT-NIR spectroscopy is used for process and quality control to improve process efficiency. The increasing demand of automation requires not only a state of the art hardware but also an equivalent software.

With CMET it is possible to configure various different tasks and scenarios starting from very simple continuous measurements up to very complex batch processes with permanently changing products. To each measurement channel different products can be assigned and with that different calibration models. By using external triggers the DCS has full control over the instrument. CMET provides besides the quantitative and qualitative results a series of signals, e. g. which measurement is currently running, chemometric alarm or the actual light intensity at the measuring point.

All generated results can be stored in a log file, database or send to the DCS for visualization and archiving. An integrated watchdog function permanently monitors the hardware and software status to ensure reliable 24/7 production.

CMET Trend Display

CMET Runtime - Status Overview

CMET Setup

The CMET Setup has a modular concept which offers the user the necessary flexibility to map the vast number of different applications. CMET Setup is divided in four modular subsections with an intuitive design:

- **Spectrometer Setup:**
  Define general measurement points and measurement parameters
- **Product Setup:**
  Configure product specific parameters such as calibration model, storing options, product information
- **I/O Setup:**
  Setup the different communication protocols, check OPC Items and specify logfile parameters.
- **Scenario Setup:**
  Assign a product to a specific measurement point and define start triggers and output signals. The entire setup is then exported as a scenario map which includes all necessary information to run a scenario in CMET Runtime.

CMET Runtime

The software CMET Runtime is used for two major tasks:

- background measurement & management
- continuous measurement and process monitoring

One important goal was to design an absolutely stable running process software incl. self-control functions. Furthermore CMET Runtime can be easily configured to load and start automatically a specific scenario which comes in handy during a power failure.
To monitor the most recent data, CMET Runtime is equipped with a web based trendchart interface.

Technical Info:

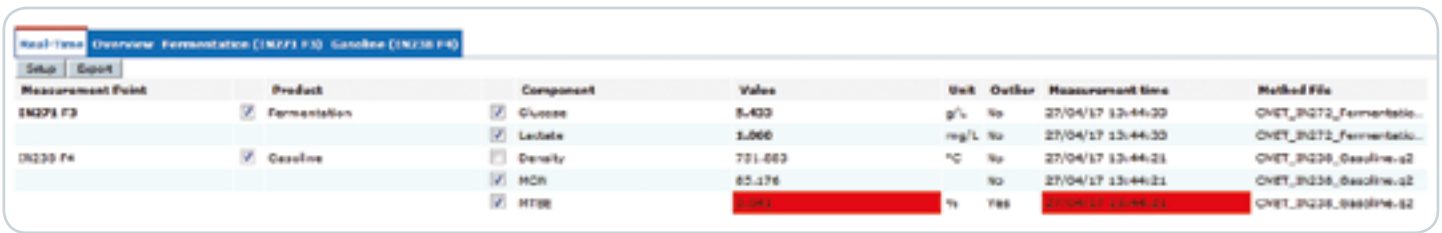
CMET supports various communication protocols:

- OPC DA as Client and Server
- Analog Communication 4 – 20 mA
- Profibus DP
- Modbus

Supported languages: English, French, German, Japanese, Portuguese, Spanish

NEW:

Supports the functionality of the new Trigger Button (C260-I) to manually start a dedicated measurement, e.g. for calibration sampling.



Real-Time Overview with Outlier Indication

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