

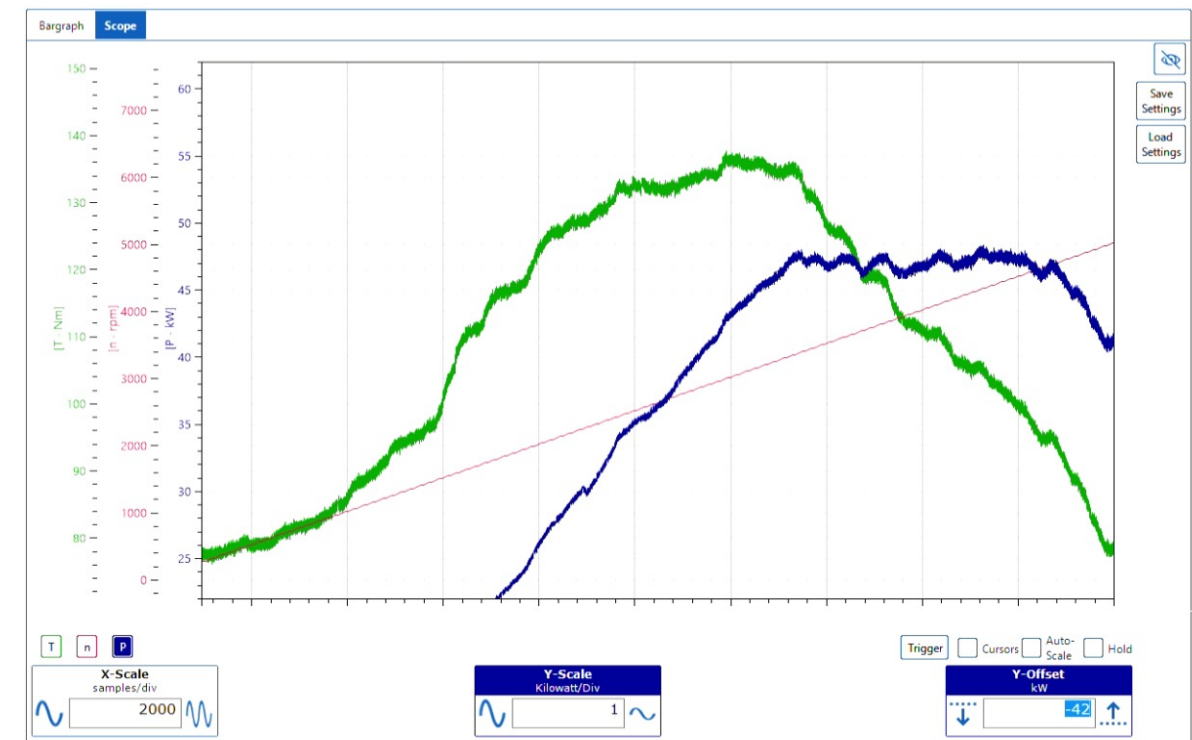
Life Data Analysis

Manner Telemetry System:

- modern telemetry data acquisition system for simple standalone devices to complex, integrated solutions.
- powerful analysis software for realtime data processing
- comprehensive toolbox for standard analysis and customizable calculations.

Include features such as:

- Sensor Calibration: Ensuring the accuracy of the collected data by calibrating the sensors.
- Visualization tools: Providing graphical representations of the data with charts such as:
 - Bargraph, Oscilloscope,
 - Line chart,
 - Histogram
 - Scatter plot / xy-Chart.
- Time & Frequency Analysis in Realtime
- Data Logging: Capturing and storing the telemetry data for later analysis.



Input Selection

Output
Title: P Unit: Watt

Input Parameters

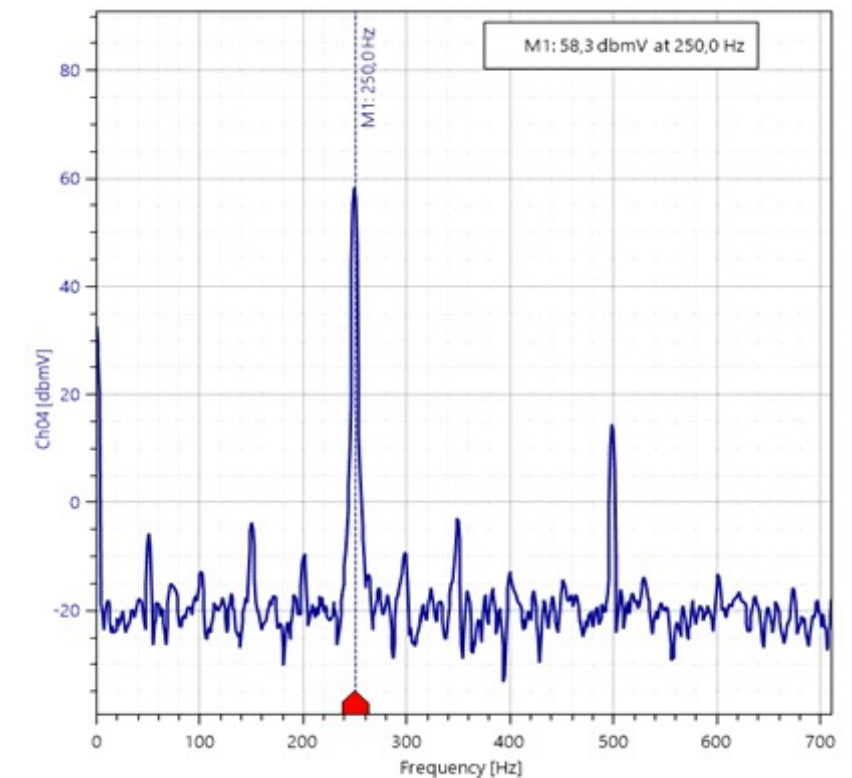
Name	Channel	Unit
r	Rot.Speed	Revolutions Per Minute
T	Torque1	100 Newtonmeter

OK Cancel

Online and Post Analysis:
Power, Torque, Efficiency, Power-Loss,
Vibration, Rotation, Vector, Angle

Calculation of reaction forces, force flow, moments,
tension, deflection and twist of the shaft ...

Berechnung der Reaktionskräfte, des Kraftflusses, der Momente, der Spannung, der Durchbiegung und Verdrehung der Well



Formula Editor

Select a function:

- Mechanical Functions
 - Efficiency
 - Power for Rotational Motion**
- Math
 - Math.E
 - Math.PI
 - Math.Tau
 - Math.Abs
 - Math.Acos
 - Math.Acosh
 - Math.Asin

Power for Rotational Motion (r, T)
Returns the mechanical power, which is calculated using the torque and speed.

Formula
 $P = 2 * \text{Math.PI} * r * T$ with P in W/kW

Parameters
r = Rotational Speed in rpm/Hz.
T = Torque in Nm/kNm.

Please enter the formula:
The values of the channels are represented by the respective short title in square brackets.
Common mathematical functions can be used from the C# Math library.
Example formula: "[Ch01] + Math.Abs([Ch02])"

MecFunc.PowerRot(rev: [Rot.Speed],t: [Torque1])

0 Errors

Code	Description

OK Cancel

Multiline / Complex Formula

Example formula: "[Ch01] + Math.Abs([Ch02])"

```
var p_in = MecFunc.PowerRot(rev: [Rot. Speed In],t: [T_in]);
var p_Out = MecFunc.PowerRot(rev: [Rot. Speed Out],t: [T_out]);
return MecFunc.EfficiencyPct(POut: [P_out],PIn: [P_in])
```

Suggestion / Formula-Tool-Box

m

Math.Sign(

Math.Truncat

Math.ScaleB(

Math.Abs(

Math.Acos(

Math.Acosh(

Math.Asin(

Math.Asinh(

"m" ist im aktuellen Kontext nicht vorhanden.

Suggestion / Channel - Selection

[

[Torque1]

[Torque2]

[Rot.Speed]

[Pin]

[Pout]

[Eta]

[PVerlust]

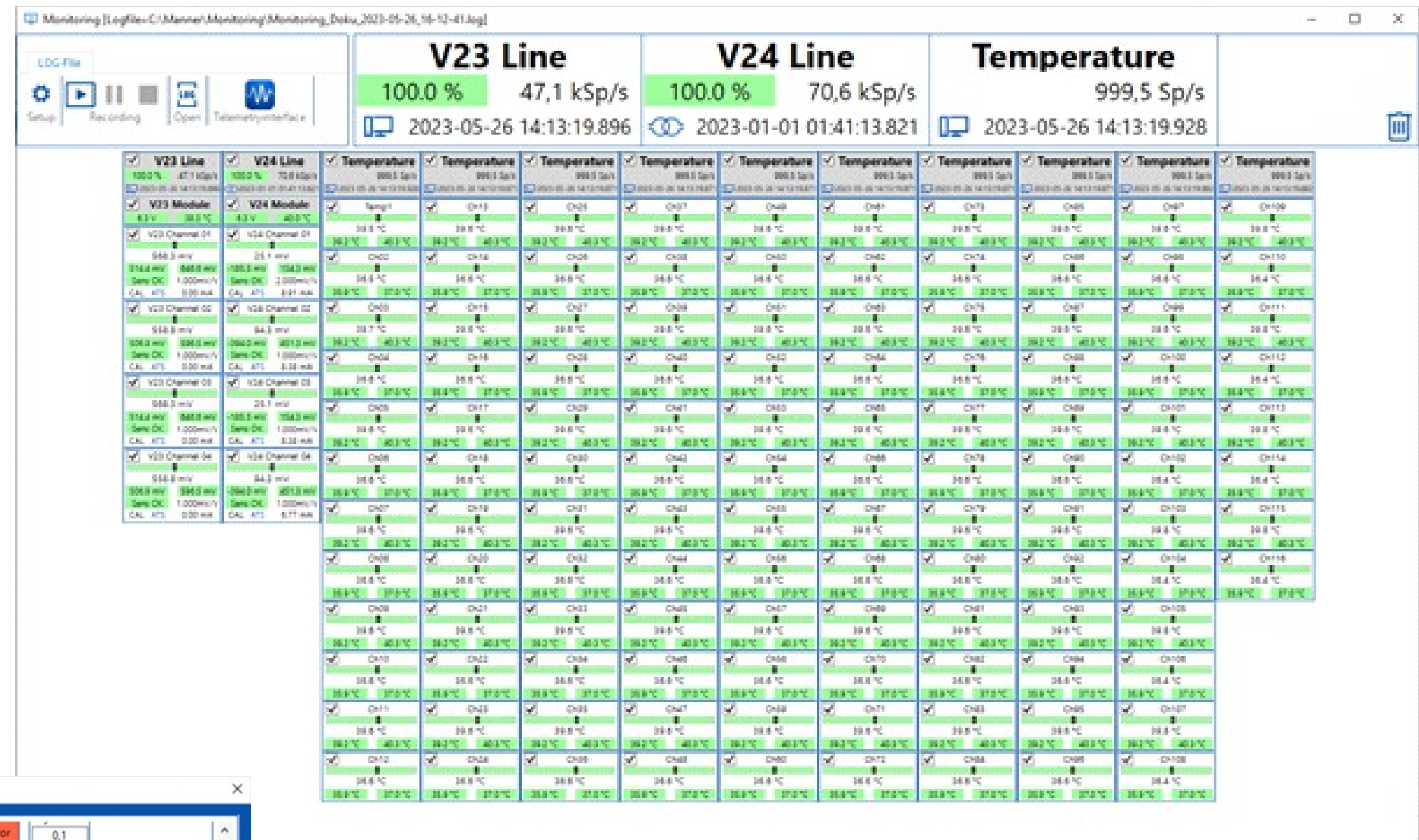
[Vektor]

ion

ehler. "]" erwartet.

CMT

Channel Monitoring and Power Control Tool



Online Sensorhealth Analysis/Overview

- Sensor Health Check
- Events / Warnings / Errors

Online: Event-Reporting

- Customize Filteroptions
- Free Trigger Level Settings

Online: Power Control / Monitoring

- RF-Power setting
- Realtime
 - Rotor-Voltage-Control
 - Rotor Thermal Protection
- Module Power Consumption Analysis

