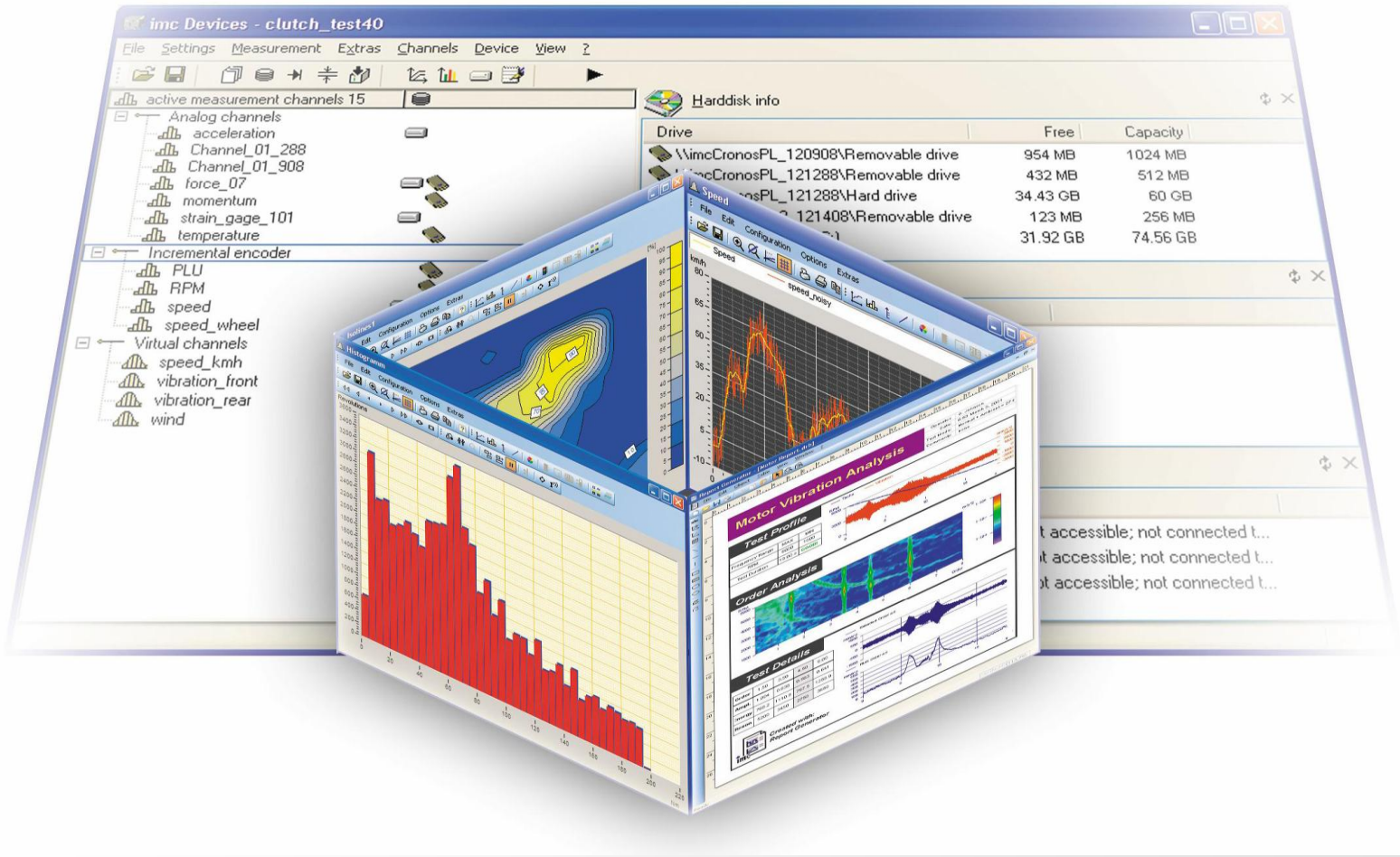
online calculation – our most important feature



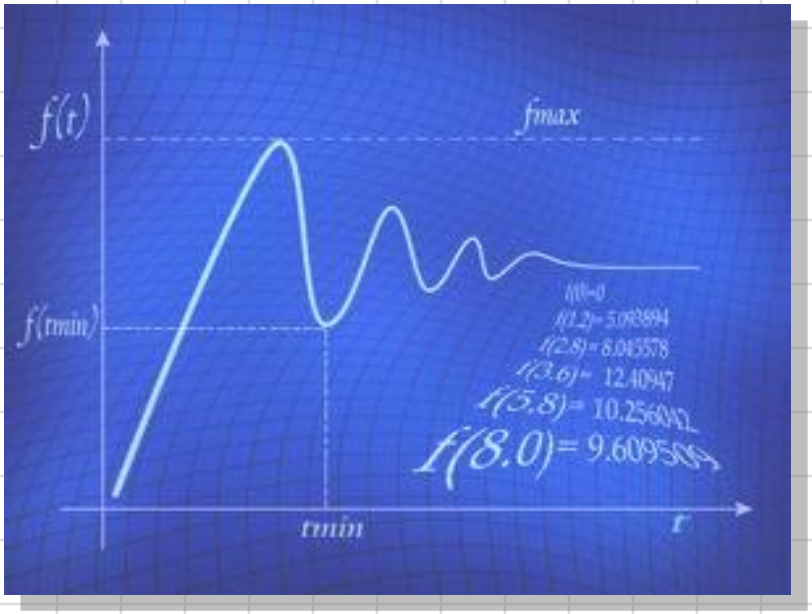
online calculation – our most important feature

Why and when do I need

Online Famos Professional?

What? Online Famos has limitations?

What are these limitations?



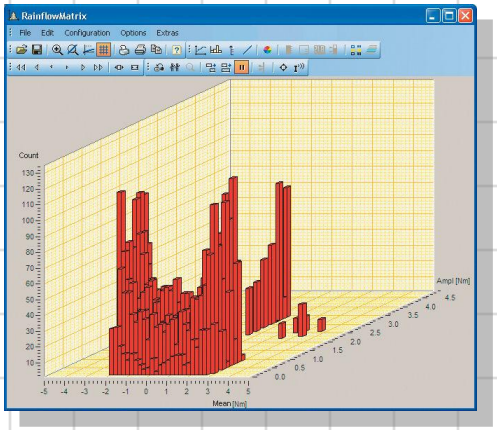
Why do I need it?

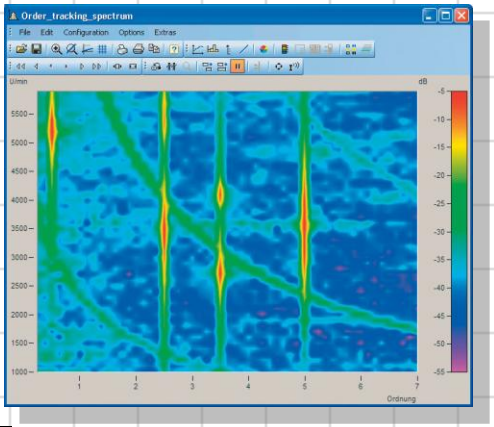
- Faster, up to +400%
- Excellent cost / performance ratio
- Use of hardware to its full capacity
- New two point controller & PID controller function
- Restore function
- More single values with new process variables
- Real-time interrupts, precise timing and synchronous calculation
- Up to 5 synchronous tasks from 100µs to 1 s

online calculation – our most important feature

Who needs this?

- Everybody who uses Online Famos
- All CRONOS PL with high channel count
- Everybody who uses more than 200kS/s
- Extensive mathematics or statistics calculations
- Test stand
- Noise and vibration

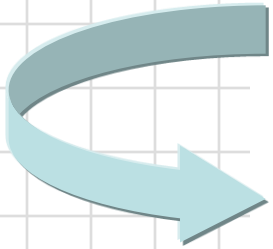


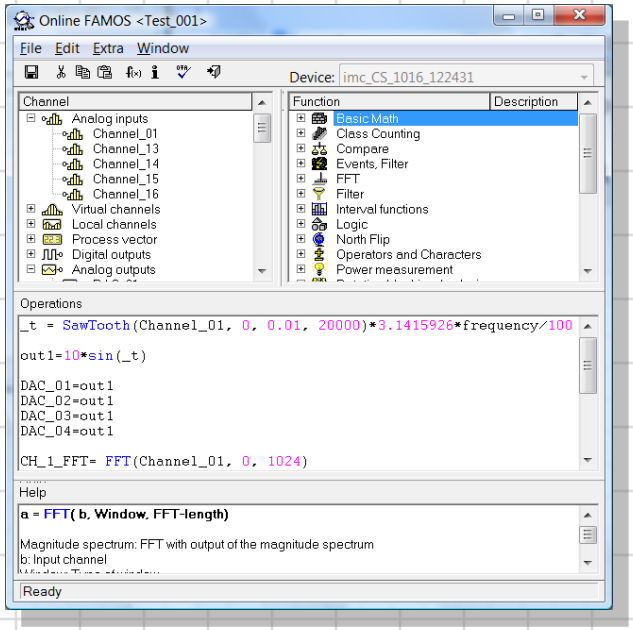


Simply all professional users

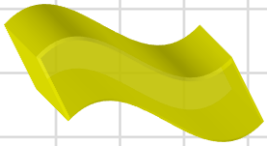
online calculation – our most important feature

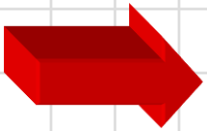
How can I see the difference?

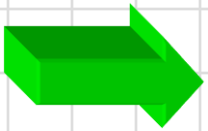


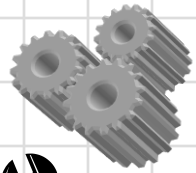


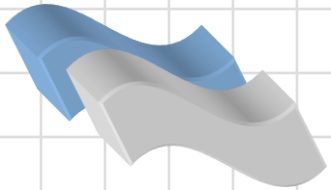
Create a sine → **Analog output** → **Analog input** → **FFT** → **analysis**







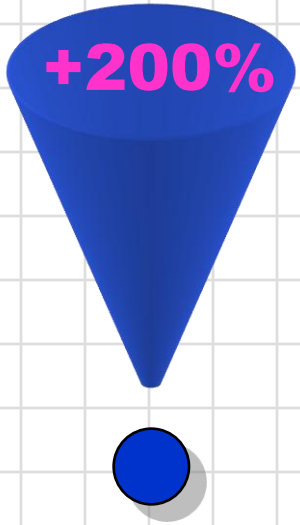




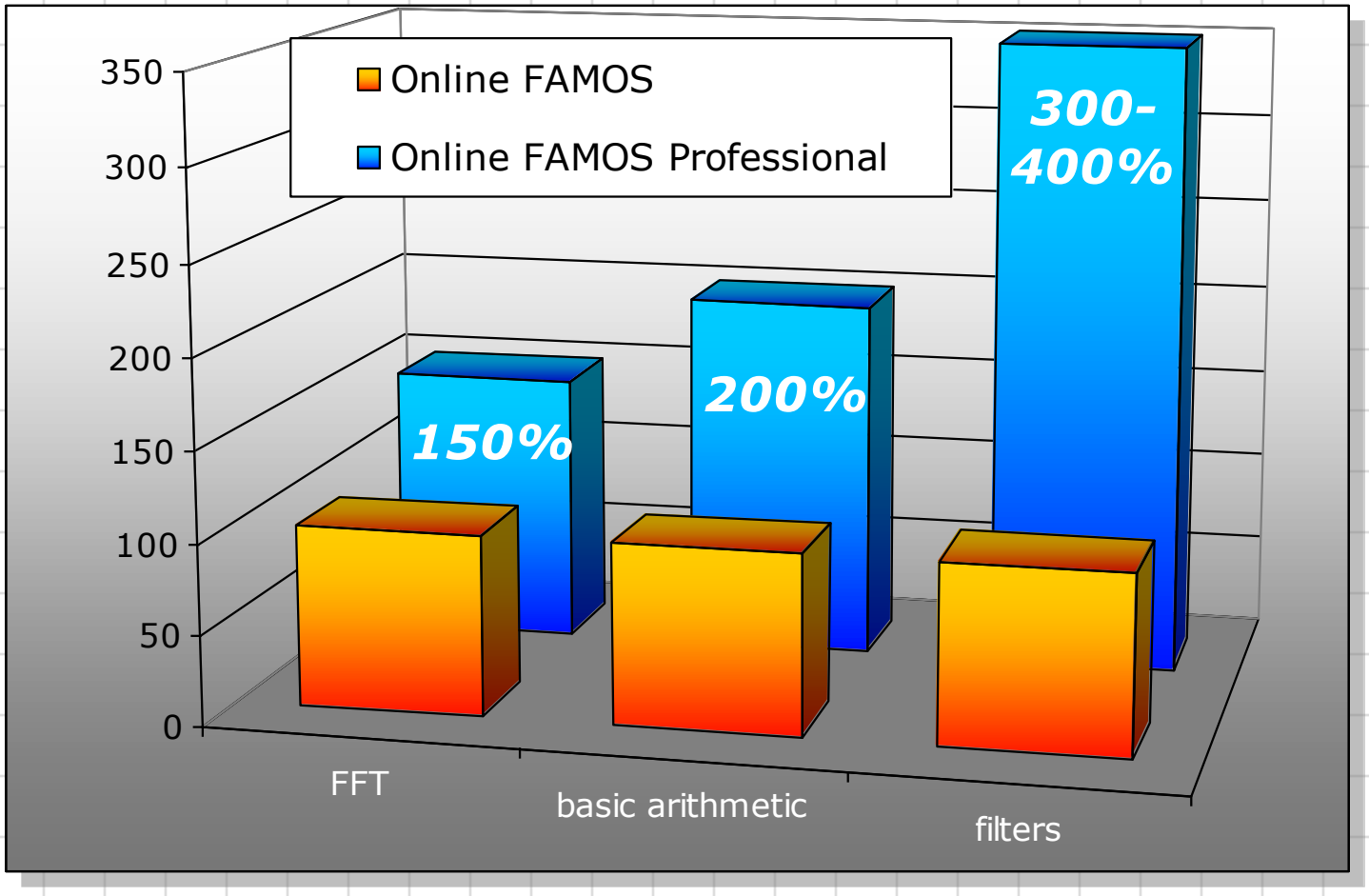
online calculation – our most important feature

FFT Results

FFT length	OFA	**OFA Prof**	difference
1024	3,66 ms	**1,83 ms**	**200%**
2048	7,19 ms	**3,73 ms**	**193%**
4096	14,76 ms	**6,89 ms**	**214%**
8192	30,09 ms	**19,78 ms**	**152%**



online calculation – our most important feature



Online Famos Professional

Synchronzied timing of several operations

Extension of OnTimer() function

Real interrupt handler

Precise timing

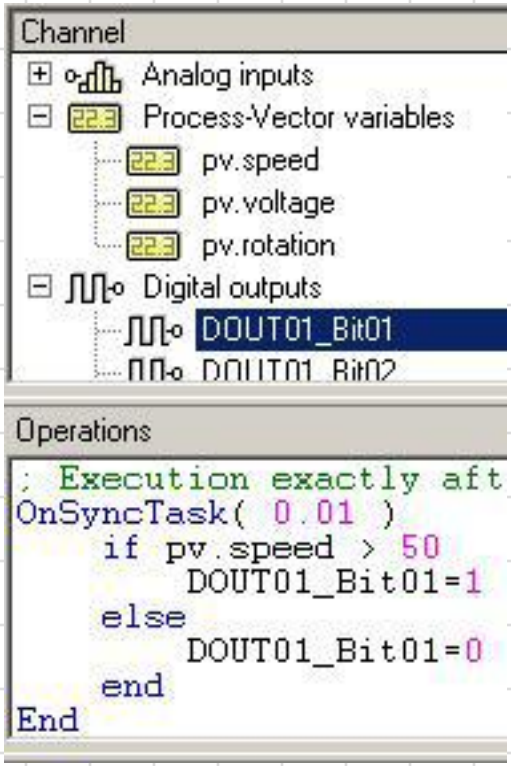
Direct access to input channels via process variable

Single value calculations

5 tasks taking from 100µs to 1s

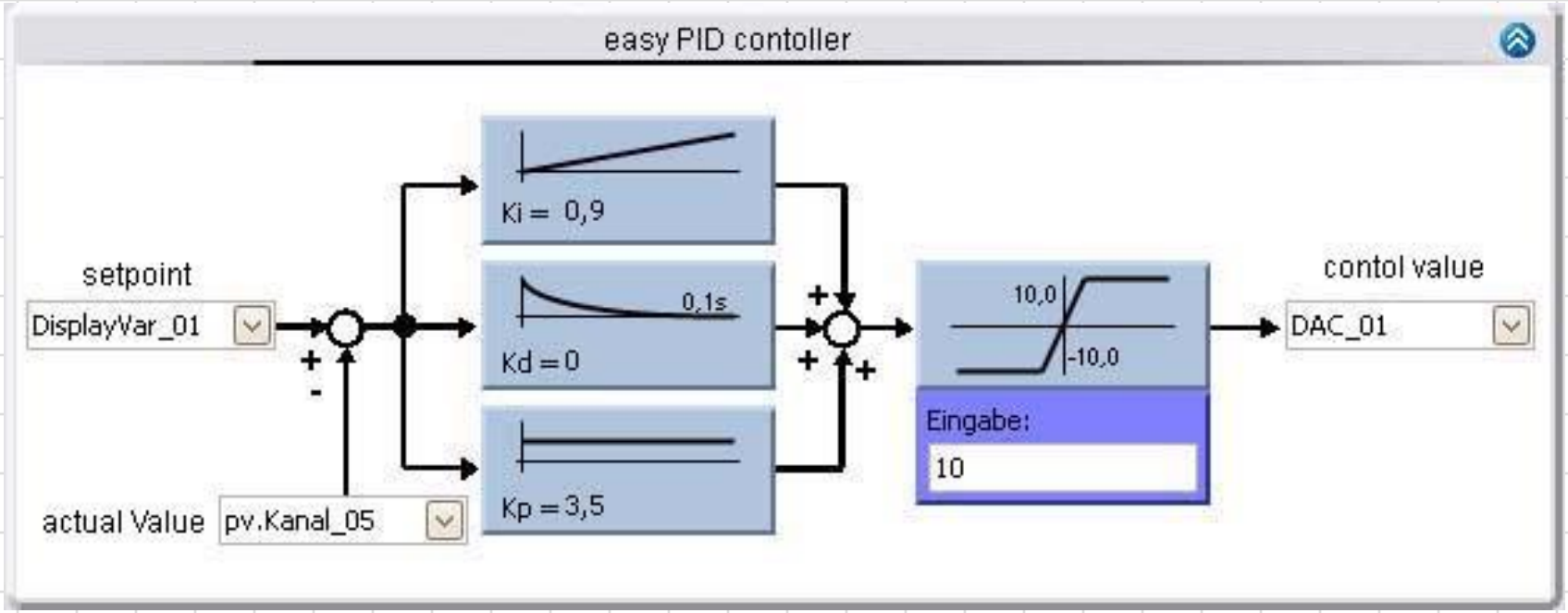
PID / 2 Point controller ...

Loop control

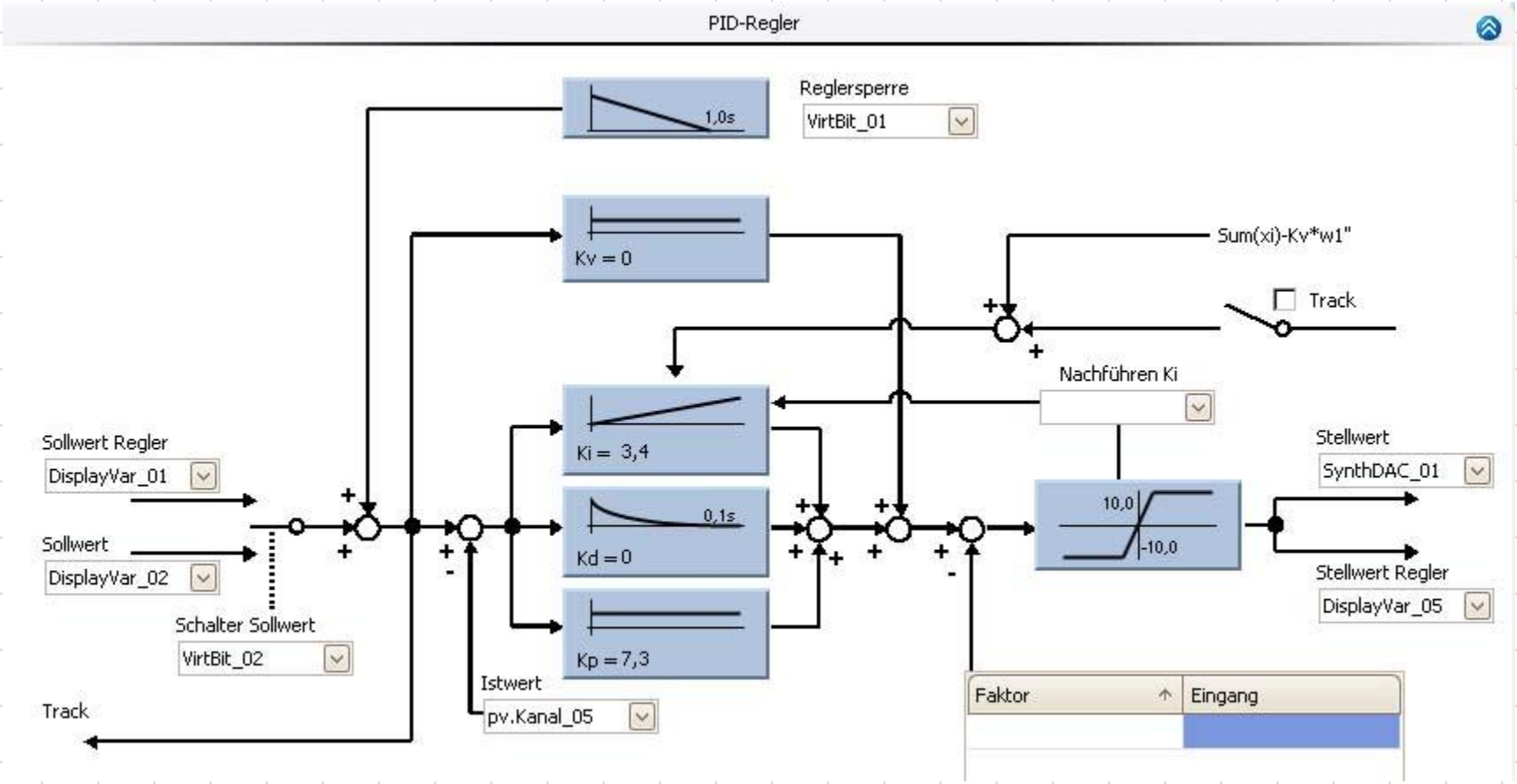


online calculation – our most important feature

PID controller principle

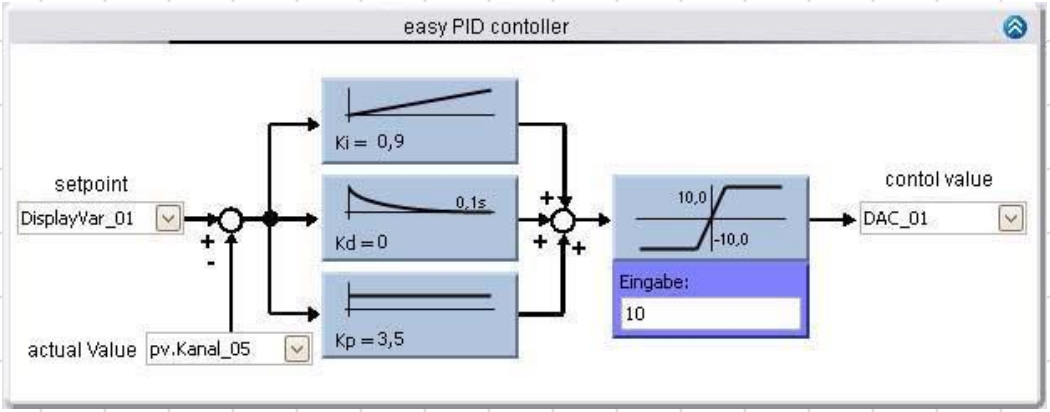


online calculation – our most important feature



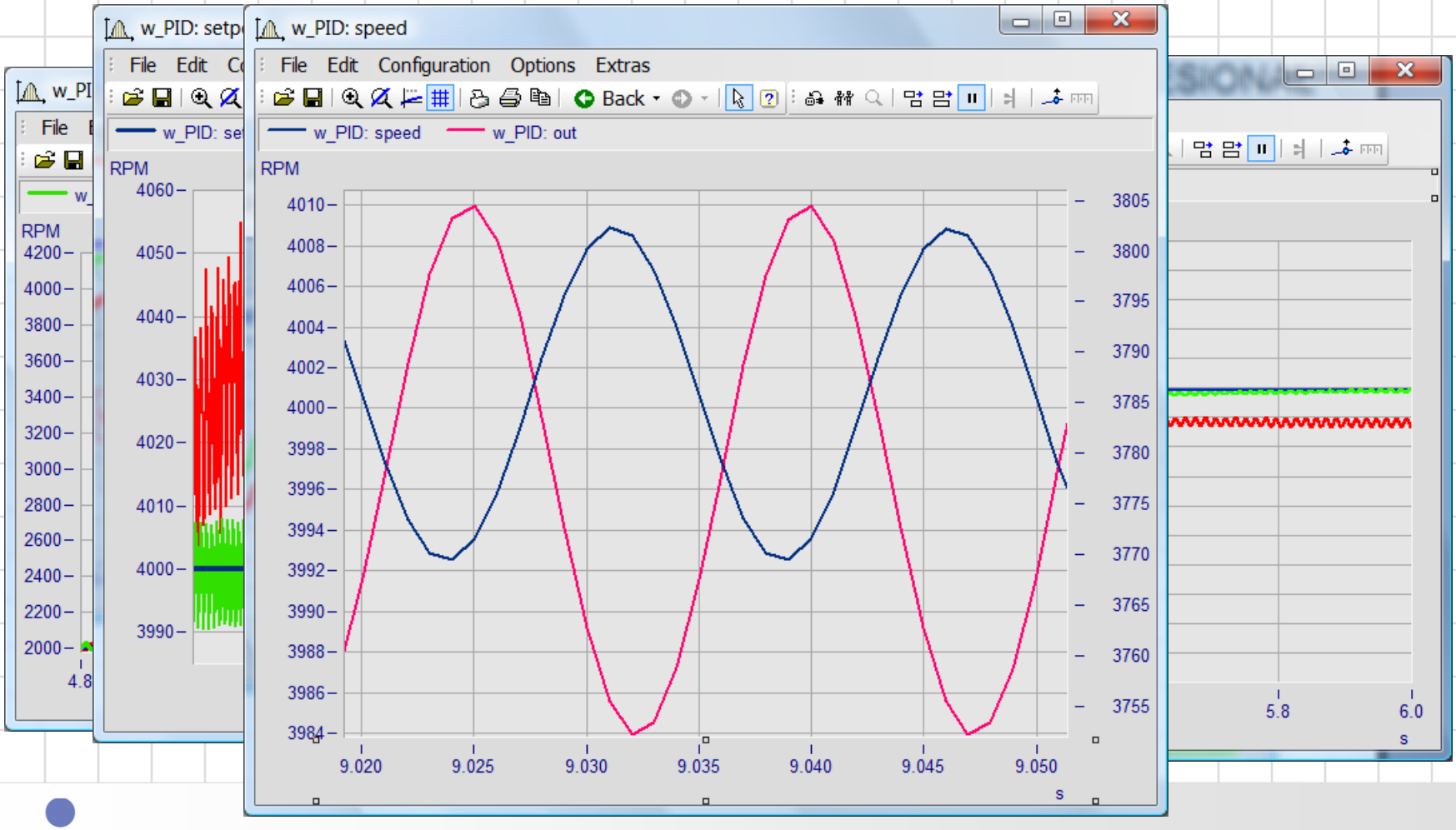
online calculation – our most important feature

How can we do this?




```
OnInitAll
   RPM_CON = CtPID(2, 5, 0) ; means P = 2; I=5; D=0
End
OnSyncTask( 0.001 )              ; means every 1ms
   RPM_CON.setpoint=pv.setpoint     ; setpoint
   DAC_01 = RPM_CON.calc(pv.speed) ; output / input
End
```

online calculation – our most important feature



online calculation – our most important feature

Excellent cost / performance ratio

Example 1:

CS7008 = 9.350 EUR

Surcharge for update to Online FAMOS Professional: +770 EUR

For *+8.2 %* extra, you get up to *+400 %* more performance.

Example 2:

Cronos PL16 + 8 x UNI-8 = 39.880 EUR

Surcharge for update to Online FAMOS Professional: +770 EUR

For *+1.9 %* extra, you get up to *+400 %* more performance.

A deal you'll be sorry you missed.

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Thank you