Time chart

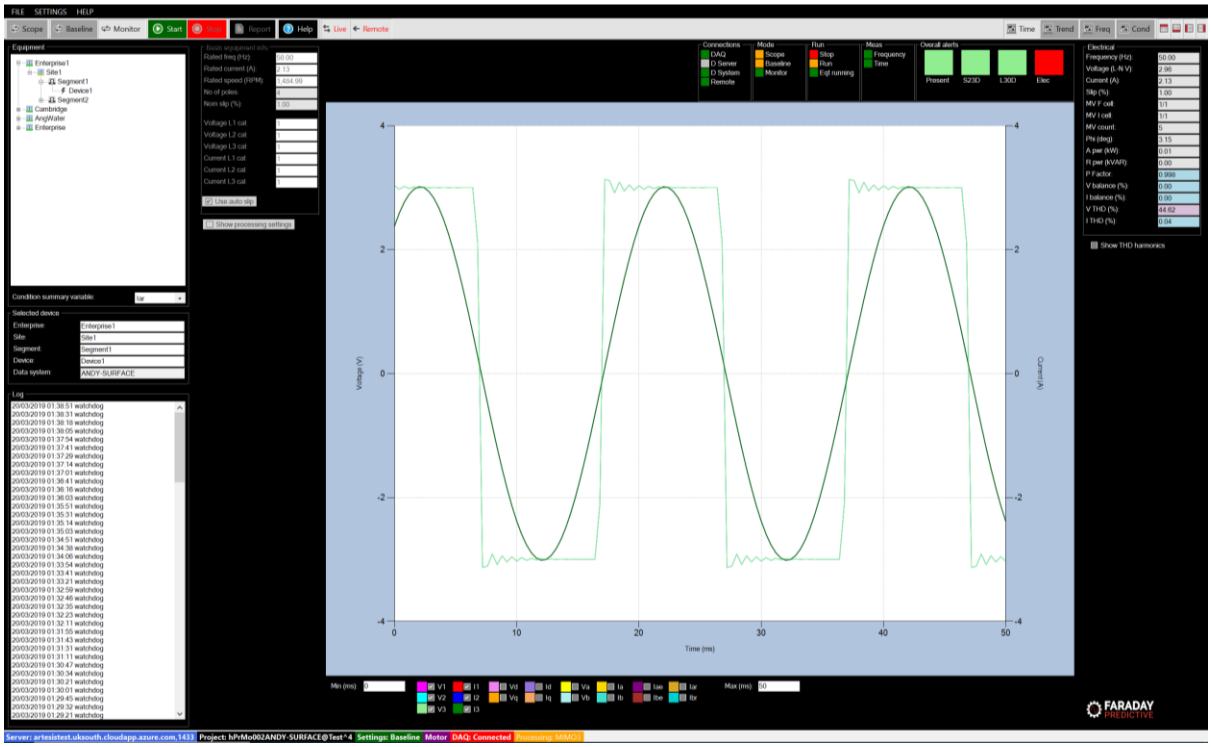

Chart summary

The Time chart allows the user to plot electrical parameters in the time domain.

Controls

Minimum and maximum times in milliseconds can be entered in the appropriate text boxes below the chart.

Measured parameters can be selected/deselected for display using checkboxes, and the colour of each plot can be changed by clicking on the colour label for that parameter.

Axis

The x axis represents time in milliseconds. A 50Hz electrical waveform has a cycle of 1/50Hz = 0.02s. The y axis represents the instantaneous value of the voltage (left hand side) or current (right hand side).

Parameters

Type	Parameter	Description
Raw Measurements	V1	Raw voltages (Phase 1, 2 and 3), with applied analogue (25kHz) and digital (5KHz) low pass filtering.
	V2	
	V3	
	I1	Raw currents (Phase 1, 2 and 3), with applied analogue (25kHz) and digital (5KHz) low pass filtering.
	I2	
	I3	
Combined Measurements	Va	Raw voltages and currents in the Alpha-Beta reference frame. They contain the same information than the raw parameters but on a two phase system.
	Vb	
	Ia	
	Ib	
	Vd	Raw voltages and currents in the Direct-Quadrant reference frame. They contain the same information than the raw parameters but on a two-phase system. This D-Q refence rotates following the line frequency.
	Vq	
	Id	
	Iq	
Modelling estimates	Iae	Estimated currents in the Alpha-Beta reference frame after applying the model.
	Ibe	
Residual measurements	Iar	Residual currents in the Alpha-Beta reference, calculated as the difference between the Combined measurements minus the modelling estimates.
	Ibr