**Common parameters**

**This section contains parameters to control the measuring procedure. Parameters as measuring interval or measuring duration are located in this section.**

* Warm-up time
  + During the warm-up time, the LEDs are on, but the measurement has not yet started.
  + ?
* Measurement interval
  + This is the interval between the start of one measurement to the start of the next measurement. For online measurements without external power supply, the interval can be set to save energy. In this case, please use the power-down option.
  + ?
* Number of measurements
  + Performs a given number of measurements and stops afterwards. Only valid if continuous measurement is set to autostop.
  + 3
* LED measuring duration
  + Duration of the LED brightness measurement. Only valid for PhycoProbes up to series 17.
  + ?
* Measuring type
  + Select between continuous, single and autostop (after a number of measurements given in “number of measurements”.
  + autostop
* Measurement time
  + Duration of a single measurement. The longer the time, the more stable the results are.
  + Look at options
* Send results
  + If set, the results of each measurement will be send to the PC directly after the measurement. Please disable for maximum measuring frequency.
  + In case ‘Send results’ is set to ‘off’, please be aware that you will not receive results directly during measurement to bbe++ even when you started the measurement by way of bbe++. In this case, please download the data from the PhycoProbe later by use of the USB adapter and import the flp file in question to bbe++.
  + Set
* Power-down after measurement
  + If set, the PhycoProbe switches off after each measurement to save power. This makes it possible to collect data from some days or weeks depending on the measuring frequency.
  + Not set
* Store results
  + If set, the results will be stored in the internal data logger
  + Set
* Start measurement on power-up
  + If set, the PhycoProbe starts a measurement after starting. This is set when using the PhycoProbe as a stand-alone unit without any PC.
  + Not set
* Enter comment
  + If set, a comment can be entered when starting the measurement.
* Air pressure from first measurement
  + If set, the air pressure reading for the calculation of the depth is taken from the first dataset. If not set, it has to be measured separately.
  + Set
* Calculate concentration after each measurement
  + If set, the PhycoProbe calculates the chlorophyll concentration of each algae class. This can be used if the instrument is operated at a PLC system without Windows.
  + If not set, the concentration is calculated in bbe++. This is faster.
* Serial number
  + Shows the serial number of the PhycoProbe.
  + Not set
* Software version
  + Shows the software version of the firmware.
  + Set
* Name of parameter set
  + Shows the name of the current parameter set. This is only available if there are more than one parameter sets stored in the PhycoProbe.
  + Set

**Fit parameters**

* Name
  + The names of the algae classes can be entered here.
* Enabled for fit flag
  + Each algae class can be enabled / disabled. There are 12 possible classes that can be used, but please note that the used classes should be characterised with a unique fingerprint to omit cross talking and therefore wrong differentiation.
* Class type: Algae class / Yellow Substances / Pigment / Turbidity
  + The classes will be treated differently depending on their set type. All components marked as algae class will be added to create the total chlorophyll concentration. If set to yellow substances (on), the measured concentration is not added to the total algae concentration and the displayed unit is r.u. Finally while calibrating yellow substances 10 measurements are averaged to calculate the fingerprint.
* Ultra-filtrated water offsets
  + Displays the results of the offset calibration of ultra-filtrated sample water.
* Distilled water offsets
  + Displays the results of the offset calibration of distilled water.
* Fingerprints
  + Displays the results of the algae class calibrations.
* Standard deviations
  + Standard deviations of the fingerprints of each algae class. This standard deviation refers to variations within one specific algae class. The greater the standard deviation, the less important the measured value for this algae class
* Date of calibration
  + Date of the last calibration at bbe Moldaenke.
* Global correction factor
  + Set to 1 by default. All algae concentrations are multiplied by this factor.
* Cell factors
  + Factor to convert the concentration of the algae classes to cell counts.

**Measurement parameters**

* Air pressure
  + Displays the air pressure. This parameter is set when clicking the “Set air pressure“ button before starting the measurement. The parameter is used to calculate the depth.
  + Off
* DA values
  + Current settings of the LED controller.
* Offsets and gradients of transmission, pressure, temperatures and voltage
  + Displays the results of the calibrations of the measurands.
  + New tab for unit parameters: Here the algae class specific unit could be changed if differing from standard μg/L.
* Salinity
  + Enter the salinity of the water to enhance the calculation of the depth.
  + off
* Required values of the LEDs
  + Values for the basic calibration of the PhycoProbe
* Temperature correction
  + Temperature correction factors for the given temperature ranges.

**Turbidity parameters**

* Turbidity compensation
  + Setting to activate and deactivate the turbidity compensation.
* FTU reflection/mitigation compensation
  + Factors to adjust the turbidity compensation that consider light scattering effects as well as inner filtering effects