

## FieldMaxII Low-Level Remote Commands

These commands are used to set different parameters on the FieldMaxII meter using the “Meter Settings” VI.

Commands can be sent with any of the extensions listed that are associated with that command.

To query any of these meters settings, send the command alone without any extension.

For example, the **BKL** command can be used to set or query the backlight setting on the meter. **BKL1** turns the backlight on, **BKLO** turns the backlight off, and **BKL** queries the current state of the backlight setting.

### Analog Out Voltage

Command: **AFS**

Extensions:

**1** = 1 V full scale

**2** = 2 V full scale

**5** = 5 V full scale

Example: **AFS2** sets the analog out voltage to 2 V full-scale.

### Area Correction Diameter

Command: **DCD**

Extensions: Diameter values (in millimeters) ranging from **0.01** to **999.99**

Example: **DCD2.5** sets the area correction diameter value to 2.5 mm.

### Area Correction Enabled/Disabled

Command: **DCM**

Extensions:

**0** = disabled

**1** = enabled

Example: **DCM1** turns the area correction feature on.

### Attenuation Correction Factor

Command: **ACF**

Extensions: Values ranging from **1.0** to **999.99**

Example: **ACF4.5** sets the attenuation correction factor value to 4.5.

### Attenuation Correction Enabled/Disabled

Command: **ACM**

Extensions:

**0** = disabled

**1** = enabled

Example: **ACM1** turns the attenuation correction feature on.

### Auto-Range Enabled/Disabled (Only relevant when a power sensor is connected to the meter.)

Command: **AUT**

Extensions:

**0** = disabled

**1** = enabled

Example: **AUT1** turns the auto-range feature on.

#### Averaging Enabled/Disabled

Command: **SMM**

Extensions:

**0** = disabled

**1** = enabled

Example: **SMM1** turns the averaging feature on.

#### Average Sample Size – Pulses (Only relevant when an energy sensor is connected to the meter.)

Command: **SMP**

Extensions: Values (number of pulses) ranging from **2** to **1000**

Example: **SMP100** sets the sample size for the averaging feature to 100 pulses.

#### Average Sample Size – Seconds (Only relevant when a power sensor is connected to the meter.)

Command: **SMS**

Extensions: Values (in seconds) ranging from **1** to **60**

Example: **SMS10** sets the sample size for the averaging feature to 10 seconds.

#### Backlight Enabled/Disabled

Command: **BKL**

Extensions:

**0** = disabled

**1** = enabled

Example: **BKL1** turns the backlight feature on.

#### Hold Mode Enabled/Disabled (Only relevant with FieldMaxII-TO model.)

Command: **HLD**

Extensions:

**0** = disabled

**1** = enabled

Example: **HLD1** turns hold mode on.

#### Measurement Mode (Only relevant with FieldMaxII-TOP model.)

Command: **JWM**

Extensions:

**J** = energy (joules) mode

**W** = power (watts) mode

Example: **JWMJ** sets the meter to measure energy (joules).

#### Meter Power On/Off

Command: **PWR**

Extensions:

**0** = off

**1** = on

Example: **PWR1** turns the meter on.

### Range Setting

Command: **RNG**

Extensions: Values (representing either power or energy) to align with the available ranges on the meter. Available ranges on the FieldMaxII are limited by the sensor that is connected to the meter and must fall within the min and max range values based on that sensor.

Example: **RNG3** sets the meter for the 3 W power (or 3 J energy) range .

Example: **RNG0.030** sets the meter for the 30 mW power (or 30 mJ energy) range.

Note: The reply from this command is in the following format: <set range, min range, max range>

Example Reply: **3.0E-02,3.0E-03,3.0E+01** representing a set range of 0.030, min range of 0.003, and max range of 3.0.

### Rep Rate (Hz) Display Enabled/Disabled (Only relevant when an energy sensor is connected to the meter.)

Command: **HTZ**

Extensions:

**0** = disabled

**1** = enabled

Example: **HTZ1** turns the rep rate (Hz) display on.

### Speed-Up Settings Enabled/Disabled (Only relevant when a thermopile power sensor is connected to the meter.)

Note: The speed-up settings are controlled separately for each of the different outputs.

Command – Analog Out: **SAO**

Command – Digital Display: **SLD**

Command – Host Data (USB Port): **SHD**

Command – Tuning Bar Display: **SLM**

Extensions:

**0** = disabled

**1** = enabled

Example: **SAO1** turns the speed-up feature on for the analog out port.

Example: **SHD1** turns the speed-up feature on for the data being sent through the USB port.

### Statistics Mode

Command: **STA**

Extensions:

**OFF** = statistics mode off

**MAX** = statistics batch maximum value

**MIN** = statistics batch minimum value

**MEAN** = statistics batch mean value

**STDV** = statistics batch standard deviation value (Only relevant when an energy sensor is connected to the meter.)

Example: **STAMEAN** turns the statistics batch mode on and selects the mean value to display.

### Statistics Batch Restart

Command: **SRM**

Extensions:

**M** = manual

**A** = auto

Example: **SRMA** sets the statistics mode for auto-restart when a batch is finished being collected.

Statistics Batch Size – Pulses (Only relevant when an energy sensor is connected to the meter.)

Command: **SBP**

Extensions: Values (number of pulses) ranging from **2** to **99999**

Example: **SBP100** sets the statistics batch size to 100 pulses.

Statistics Batch Size – Seconds (Only relevant when a power sensor is connected to the meter.)

Command: **SBS**

Extensions: Values (in seconds) ranging from **1** to **99999**

Example: **SBS10** sets the statistics batch size to 10 seconds.

Trigger Level (Only relevant when an energy sensor is connected to the meter.)

Command: **TRG**

Extensions: Values (in percent) ranging from **2** to **20**

Example: **TRG10** sets the trigger level to 10%.

Wavelength Correction

Command: **WOO**

Extensions: Values (in nanometers) for the wavelength correction feature. The allowed wavelengths that can be set into the FieldMaxII are determined by the sensor that is connected and will need to fall between the min wavelength and max wavelength values for that sensor. Values outside of the min and max will be coerced to fall within the allowed range.

Example: **WOO1064** sets the wavelength correction feature for 1064 nm.

Note: The reply from this command is in the following format: <set wavelength, min wavelength, max wavelength>

Example Reply: **1064,190,11000** representing a set wavelength of 1064 nm, min wavelength of 190 nm, and max wavelength of 11000 nm.