



MRL-B Application Note A1001

User configured accuracy and range (sNur)

If an application does not require the maximum measuring range (500m) and/or the maximum accuracy ($\pm 1.5\text{mm}/\pm 3\text{mm}$) these settings can be changed to give a decrease in the measurement time using the following commands.

Configuration command:

User configured accuracy and range (sNur)

The distance measurement is configured to fulfill the settings according to the following command and then it is possible to reduce the maximum distance and/or accuracy and reduce the corresponding measurement time. Since not all settings are possible, the Get command returns the operative settings. The application of this command only affects the user configured commands.

	Set Command	Get Command
Command	<code>sNur+xxxxxxxx+yyyyyyy<trm></code>	<code>sNur</code>
Return successful	<code>gNur+aaaaaaaa+bbbbbbbb<trm></code>	<code>gNur+aaaaaaaa+bbbbbbbb<trm></code>
Return Error	<code>gN@Ezzz<trm></code>	<code>gN@Ezzz<trm></code>
Parameters	<p><i>N</i> Module number (0..9)</p> <p><i>xxxxxxxx</i> Desired Accuracy in 0.1mm</p> <p><i>yyyyyyy</i> Desired max distance in 0.1mm</p> <p><i>aaaaaaaa</i> Effective Accuracy in 0.1mm</p> <p><i>bbbbbbbb</i> Effective Max distance in 0.1mm</p> <p><i>zzz</i> Error code</p>	

To (For) **save** (saving) the new settings, please use the "Save configuration parameters"-command (sNs).

Possible measuring commands:

Only the following commands are influenced by the above settings. All these commands are described in the "Technical Reference Manual" in chapter: "8.5 Special User Commands" which may be downloaded from www.metrologyresource.com

- User configured distance measurement (sNug)
- User-configured single sensor tracking (sNuh)
- User-configured tracking with buffering – Start (sNuf)
- Read out – User-configured tracking with buffering (sNuq)

Important Notices:

- The standard measurement commands *sNg* / *sNh* / *sNf* and *sNq* are NOT influenced. They will always operate with the Dimetix specified measuring range (500m) and maximum accuracy ($\pm 1.5\text{mm}/\pm 3\text{mm}$).
- After a device-reset the "User configured accuracy and range (sNur)-configuration" will be set back to its default values (500m and maximum accuracy).