

# SICK

## Quickmanual

Applikation:  
Application: **Telegrams LMS 100**

Version 2.0

### Log into device

| Userlevel         | Passwort | Hash-Value |
|-------------------|----------|------------|
| maintenance       | main     | B21ACE26   |
| authorised client | client   | F4724744   |

PC-> LMS

Telegram structure: sMN SetAccessMode User level Password

| Telegram     | Description                     | Variable | Length (Bytes) | Values   |
|--------------|---------------------------------|----------|----------------|--|
| Command Type | Sopas by name                   | string   | 3              | sMN  |
| Command      | User level                      | string   | 12             | SetAccessMode  |
| User level   | select User level               | int_8    | 1              | 02 maintenance<br>03 authorised client<br>04 Service |
| Password     | "Hash- value for the User level | uint_32  | 4              | 00000000-<br>FFFFFFFF                                |

LMS -> PC

Telegram structure: sAN SetAccessMode change of user level

| Telegram          | Description   | Variable | Length (Bytes) | Values                 |
|-------------------|---------------|----------|----------------|------------------------|
| Command Type      | Sopas by name | string   | 3              | sAN                    |
| Command           | User level    | string   | 12             | SetAcessMode           |
| change user level | changed level | bool_1   | 1              | 00 Error<br>01 Success |

### Example

#### sMN SetAccessMode 03 F4724744

Telegramm to LMS 100 (PC->LMS) :

<STX>sMN{SPC}SetAccessMode{SPC}03{SPC}F4724744<ETX>

Hex String to LMS (PC-> LMS):

02 73 4D 4E 20 53 65 74 41 63 63 65 73 73 4D 6F 64 65 20 30 33 20 46 34 37 32 34 37  
34 34 03

Answer of LMS 100 (LMS -> PC):

<STX>sAN{SPC}SetAccessMode{SPC}1<ETX>

Hex String to Pc (LMS -> PC):

02 73 41 4E 20 53 65 74 41 63 63 65 73 73 4D 6F 64 65 20 31 03

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## Telegram structure: sMN mLMPsetscancfg Frequency and Resolution

PC-> LMS

| Telegram           | Description                                     | Variable | Length (Bytes) | Values                          |
|--------------------|---|----------|----------------|---------------------------------|
| Command Type       | Sopas by name                                   | string   | 3              | sMN                             |
| Command            | Config of scan frequency and angular resolution | string   | 14             | mLMPsetscancfg                  |
| Scan Frequency     | values in 1/100 Hz<br><b>only 2500 or 5000</b>  | unit 32  | 4              | 2500 for 25Hz<br>5000 for 50 Hz |
| Value              | reserved  |          | 1              | 1                               |
| angular resolution | values in 1/100 Hz<br><b>only 2500 or 5000</b>  | unit 32  | 4              | 2500 for 25Hz<br>5000 for 50 Hz |
| Start angle        | output in 1/10.000 °                            | int32    | 4              | -450000 +2250000                |
| stop angle         | output in 1/10.000 °                            | int32    | 4              | -450000 +2250000                |

**!! Start and Stop angle are fix - 45° to 225° changes will have no effect!!**

## Telegram structure: sMN mLMPsetscancfg Frequency and Resolution

LMS -> PC

| Telegram           | Description                                    | Variable | Length (Bytes) | Values   |
|--------------------|--|----------|----------------|--|
| Command Type       | Sopas by name                                  | string   | 3              | sAN  |
| Command            | Info of scan frequency and angular resolution  | string   | 14             | mLMPsetscancfg   |
| Status Code        | accepted when value is 0                       | Enum8    | 1              | 0 no Error<br>1 Frequency Error<br>2 Resolution Error<br>3 Res. and Scn. Error<br>4 Scanarea Error<br>5 other Errors |
| Scan Frequency     | values in 1/100 Hz<br><b>only 2500 or 5000</b> | unit 32  | 4              | 9C4h for 25Hz<br>1388h for 50 Hz   |
| Value              | reserved                                       |          | 1              | 1  |
| angular resolution | values in 1/100 Hz<br><b>only 2500 or 5000</b> | unit 32  | 4              | 9C4h for 25Hz<br>1388h for 50 Hz   |
| Start angle        | output in 1/10.000 °                           | int32    | 4              | FFF92230h 225510h<br>(-450000 +2250000)  |
| stop angle         | output in 1/10.000 °                           | int32    | 4              | FFF92230h 225510h<br>(-450000 +2250000)  |

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## Example

**sMN mLMPsetscancfg +5000 +1 +5000 -450000 +2250000**

Telegramm to LMS 100 (**PC->LMS**) :

<STX>sMN{SPC}mLMPsetscancfg{SPC}+5000{SPC}+1{SPC}+5000{SPC}-450000{SPC}+2250000<ETX>

Hex String to LMS (**PC-> LMS**):

02 73 4D 4E 20 6D 4C 4D 50 73 65 74 73 63 61 6E 63 66 67 20 2B 35 30 30 30 20 2B 31  
20 2B 35 30 30 30 20 2D 34 35 30 30 30 30 20 2B 32 32 35 30 30 30 30 03

Answer of LMS 100 (**LMS -> PC**):

<STX> sAN{SPC}mLMPsetscancfg{SPC}0{SPC}1388{SPC}1{SPC}1388{SPC}FFF92230{SPC}225510

Hex String to Pc (**LMS -> PC**):

02 73 41 4E 20 6D 4C 4D 50 73 65 74 73 63 61 6E 63 66 67 20 30 20 31 33 38 38 20 31  
20 31 33 38 38 20 46 46 46 39 32 32 33 30 20 32 32 35 35 31 30 03

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## Telegram structure sRN LMPscancfg get Frequency and Resolution

PC-> LMS

| Telegram     | Description                                   | Variable | Length (Bytes) | Values     |
|--------------|---|----------|----------------|------------|
| Command Type | Sopas by name                                 | string   | 3              | sRN        |
| Command      | Info of scan frequency and angular resolution | string   | 10             | LMPscancfg |

Telegram structure: sAN LMPscancfg Frequency and Resolution  
LMS -> PC

| Telegram           | Description                                    | Variable | Length (Bytes) | Values                                  |
|--------------------|--|----------|----------------|---|
| Command Type       | Sopas by name                                  | string   | 3              | sAN                                     |
| Command            | Info of scan frequency and angular resolution  | string   | 14             | mLMPsetscancfg                          |
| Scan Frequency     | values in 1/100 Hz<br><b>only 2500 or 5000</b> | unit 32  | 4              | 9C4h for 25Hz<br>1388h for 50 Hz        |
| Value              | reserved                                       |          | 1              | 1                                       |
| angular resolution | values in 1/100 Hz<br><b>only 2500 or 5000</b> | unit 32  | 4              | 9C4h for 25Hz<br>1388h for 50 Hz        |
| Start angle        | output in 1/10.000 °                           | int32    | 4              | FFF92230h 225510h<br>(-450000 +2250000) |
| stop angle         | output in 1/10.000 °                           | int32    | 4              | FFF92230h 225510h<br>(-450000 +2250000) |

### Example

#### sRN LMPscancfg

Telegramm to LMS 100 (PC->LMS) :

<STX>sRN{SPC}LMPscancfg<ETX>

Hex String to LMS (PC-> LMS):

02 73 52 4E 20 4C 4D 50 73 63 61 6E 63 66 67 03

Answer of LMS 100 (LMS -> PC):

<STX>sRA{SPC}LMPscancfg{SPC}1388{SPC}1{SPC}1388{SPC}FFF92230{SPC}225510<ETX>

Hex String to Pc (LMS -> PC):

02 73 52 41 20 4C 4D 50 73 63 61 6E 63 66 67 20 31 33 38 38 20 31 20 31 33 38 38 20 46 46 46 39 32 32 33 30 20 32 32 35 35 31 30 03

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## Telegram structure sMN LMCstartmeas sets the LMS in measurement mode

PC-> LMS

| Telegram     | Description      | Variable | Length (Bytes) | Values       |
|--------------|------------------|----------|----------------|--------------|
| Command Type | Sopas by name    | string   | 3              | sMN          |
| Command      | Start Mesurement | string   | 12             | LMCstartmeas |

## Telegram structure sAN LMCstartmeas sets the LMS in measurement mode

LMS -> PC

| Telegram     | Description              | Variable | Length (Bytes) | Values                      |
|--------------|--------------------------|----------|----------------|-----------------------------|
| Command Type | Sopas by name            | string   | 3              | sAN                         |
| Command      | Start Mesurement         | string   | 12             | LMCstartmeas                |
| Status Code  | accepted when value is 0 | Enum8    | 1              | 0 no Error<br>1 not allowed |

## Example

### sMN LMCstartmeas

Telegramm to LMS 100 (PC->LMS) :

<STX>sMN[SPC]LMCstartmeas<ETX>

Hex String to LMS (PC-> LMS):

02 73 4D 4E 20 4C 4D 43 73 74 61 72 74 6D 65 61 73 03

Answer of LMS 100 (LMS -> PC):

<STX>sAN[SPC]LMCstartmeas[SPC]0<ETX>

Hex String to Pc (LMS -> PC):

02 73 41 4E 20 4C 4D 43 73 74 61 72 74 6D 65 61 73 20 30 03

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## Telegram structure sMN LMCstopmeas LMS is not in measurement mode

PC-> LMS

| Telegram     | Description     | Variable | Length (Bytes) | Values      |
|--------------|-----------------|----------|----------------|-------------|
| Command Type | Sopas by name   | string   | 3              | sMN         |
| Command      | Stop Mesurement | string   | 11             | LMCstopmeas |

## Telegram structure sAN LMCstopmeas LMS is not in measurement mode

LMS -> PC

| Telegram     | Description              | Variable | Length (Bytes) | Values                      |
|--------------|--------------------------|----------|----------------|-----------------------------|
| Command Type | Sopas by name            | string   | 3              | sAN                         |
| Command      | Start Mesurement         | string   | 11             | LMCstopmeas                 |
| Status Code  | accepted when value is 0 | Enum8    | 1              | 0 no Error<br>1 not allowed |

## Example

### sMN LMCstopmeas

Telegramm to LMS 100 (PC->LMS) :

<STX>sMN{SPC}LMCstopmeas<ETX>

Hex String to LMS (PC-> LMS):

02 73 4D 4E 20 4C 4D 43 73 74 6F 70 6D 65 61 73 03

Answer of LMS 100 (LMS -> PC):

<STX>sAN{SPC}LMCstopmeas{SPC}0<ETX>

Hex String to Pc (LMS -> PC):

02 73 41 4E 20 4C 4D 43 73 74 6F 70 6D 65 61 73 20 30 03

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## Telegram structure sRN LCMstate get the Status of LMS

PC-> LMS

| Telegram     | Description     | Variable | Length (Bytes) | Values   |
|--------------|-----------------|----------|----------------|----------|
| Command Type | Sopas by name   | string   | 3              | sRN      |
| Command      | Stop Mesurement | string   | 11             | LCMstate |

## Telegram structure sAN LCMstate get the Status of LMS

LMS -> PC

| Telegram     | Description              | Variable | Length (Bytes) | Values  |
|--------------|--------------------------|----------|----------------|---|
| Command Type | Sopas by name            | string   | 3              | sAN   |
| Command      | Start Mesurement         | string   | 8              | LCMstate  |
| Status Code  | accepted when value is 0 | Enum8    | 1              | 0 no Error<br>1 pollution warning<br>2 pollution error<br>3 fatal error |

## Example

### sRN LCMstate

Telegramm to LMS 100 (PC->LMS) :

<STX>sRN{SPC}LCMstate<ETX>

Hex String to LMS (PC-> LMS):

02 73 52 4E 20 4C 43 4D 73 74 61 74 65 20 03

Answer of LMS 100 (LMS -> PC):

<STX>sAN{SPC}LCMstate{SPC}0<ETX>

Hex String to Pc (LMS -> PC):

02 73 52 41 20 4C 43 4D 73 74 61 74 65 20 30 03

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## Telegram structure sWN LMDscandatacfg configure the telegram data content

PC-> LMS

| Telegram     | Description                   | Variable          | Length (Bytes) | Values  |
|--------------|-------------------------------|-------------------|----------------|---|
| Command Type | Sopas by name                 | string            | 3              | sWN   |
| Command      | Stop Mesurement               | string            | 14             | LMDscandatacfg  |
| Data channel | Defines the Telegram content. | Array of xbyte_16 | 2              | Output channel 1:<br>01 00<br><br>Output channel 2:<br>02 00<br><br>Output channel 1+2:<br>03 00<br>---<br>10 reserved<br>FF reserved |
| Remission    | Remission data output         | bool_1            | 1              | 0 no<br>1 yes   |
| Resolution   | Resolution of Remission Data  | Enum1             | 1              | 0: 8 Bit<br>1: 16 Bit   |
| Unit         | Unit of Remission Data        | Enum8             | 1              | 0 Digits  |
| Encoder      | Encoder Data                  | Array of xbyte_16 | 2              | 00 00 no Encoder<br>01 00 Channel 1<br>02 00 reserved...<br>FF 00 reserved  |
| Position     | Position Values               | bool_1            | 1              | 0 no<br>1 yes   |
| Device Name  | sends the device name         | bool_1            | 1              | 0 no<br>1 yes   |
| Comment      | saved comment                 | bool_1            | 1              | 0 no<br>1 yes   |
| Time         | sends time information        | bool_1            | 1              | 0 no<br>1 yes   |
| Output rate  | sends the device name         | unit_16           | 2              | +1 all Scans<br>+2 each 2.nd Scan<br><br>50000 each<br>50.000 nd. Scan  |

## Telegram structure sWN LMDscandatacf get the Status of LMS

LMS -> PC

| Telegram     | Description      | Variable | Length (Bytes) | Values         |
|--------------|------------------|----------|----------------|----------------|
| Command Type | Sopas by name    | string   | 3              | sWA            |
| Command      | Start Mesurement | string   | 14             | LMDscandatacfg |





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## Example 2

Output channel 2, Encoder active, each 10th. Telegram:

**sWN LMDscandatacfg 02 00 0 1 0 01 00 0 0 0 0 +10**

The screenshot shows a configuration window titled "Output data format". It contains several settings:

- Channel 1:  Channel 2:
- Remission:  Remission type: 16 Bit Remission content: Digit
- Encoder data:
- Device name:  Time stamp:
- Output interval: 10

Telegramm to LMS 100 (PC->LMS) :

<STX>sWN{SPC}LMDscandatacfg{SPC}02{SPC}00{SPC}0{SPC}1{SPC}0{SPC}01{SPC}00{SPC}0{SPC}0{SPC}0{SPC}0{SPC}0{SPC}0{SPC}+10<ETX>

Hex String to LMS (PC-> LMS):

02 73 57 4E 20 4C 4D 44 73 63 61 6E 64 61 74 61 63 66 67 20 30 32 20 30 30 20 30 20  
31 20 30 20 30 31 20 30 30 20 30 20 30 20 30 20 30 20 2B 31 30 03

Answer of LMS 100 (LMS -> PC): sWA LMDscandatacfg

<STX>sWA{SPC}LMDscandatacfg<ETX>

Hex String to Pc (LMS -> PC):

02 73 57 41 20 4C 4D 44 73 63 61 6E 64 61 74 61 63 66 67 03

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**Telegram structure sMN mEEwriteall store the parameters permanent**

PC-> LMS

| Telegram     | Description                | Variable | Length (Bytes) | Values      |
|--------------|----------------------------|----------|----------------|-------------|
| Command Type | Sopas by name              | string   | 3              | sMN         |
| Command      | store Parameters permanent | string   | 11             | mEEwriteall |

Telegram structure sMN mEEwriteall LMS is not in measurement mode

LMS -> PC

| Telegram     | Description              | Variable | Length (Bytes) | Values                 |
|--------------|--------------------------|----------|----------------|------------------------|
| Command Type | Sopas by name            | string   | 3              | sAN                    |
| Command      | Start Mesurement         | string   | 11             | LMCstopmeas            |
| Status Code  | accepted when value is 1 | Enum8    | 1              | 00 Error<br>01 Success |

## Example

### sMN mEEwriteall

Telegramm to LMS 100 (PC->LMS) :

<STX>sMN{SPC}mEEwriteall<ETX>

Hex String to LMS (PC-> LMS):

02 73 4D 4E 20 6D 45 45 77 72 69 74 65 61 6C 6C 03

Answer of LMS 100 (LMS -> PC):

<STX>sAN{SPC} mEEwriteall{SPC}1<ETX>

Hex String to Pc (LMS -> PC):

02 73 41 4E 20 6D 45 45 77 72 69 74 65 61 6C 6C 20 31 03

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## Telegram structure sRN LMDscandata polling one Telegram

PC-> LMS

| Telegram     | Description       | Variable | Length (Bytes) | Values      |
|--------------|-------------------|----------|----------------|-------------|
| Command Type | Sopas by name     | string   | 3              | sRN         |
| Command      | Only one Telegram | string   | 11             | LMDscandata |

## Telegram structure sEN LMDscandata continuous Telegram stream

PC-> LMS

| Telegram     | Description       | Variable | Length (Bytes) | Values            |
|--------------|-------------------|----------|----------------|-------------------|
| Command Type | Sopas by name     | string   | 3              | sEN               |
| Command      | Only one Telegram | string   | 11             | LMDscandata       |
| Measurement  | Start/Stop        | Enum 8   | 1              | 0 Stop<br>1 Start |

## Telegram structure sRA LMDscandata / sSN LMDscandata Telegram stream DATA

| Telegram           | Description                          | Variable           | Length (Bytes) | Values   |
|--------------------|--------------------------------------|--------------------|----------------|--|
| Command Type       | Sopas by name                        | string             | 3              | sRA/ sSN   |
| Command            | Only one Telegram                    | string             | 11             | LMDscandata  |
| Version Number     | Version Information of Measured Data | uint 16            | 2              | 0000h FFFFh  |
| Device Information | Device Number                        | defined with Sopas | uint 16        | 0000h FFFFh  |
|                    | Serial Number                        | defined in Factory | uint32         | 00000000 - FFFFFFFF  |
|                    | Device Status                        |                    | Uint_x         | 2 x 2<br>00 00 OK<br>00 01 Error<br>00 02 Pollution Warning<br>00 04 Pollution Error |

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|                                  |                           |  |         |      |  |
|----------------------------------|---------------------------|--|---------|------|--|
| Status Information               | Telegramm counter         | Counter starting with first measured value after reaching the highest number | uint 16 | 2    | 0000h<br>FFFFh                                 |
|                                  | Scan Counter              | Counter starting with first measured value after reaching the highest number | uint 16 | 2    | 0000h<br>FFFFh                                 |
|                                  | Time since start up       | Counting the time since power up the device                                  | Uint 32 | 4    | 000000000 -<br>FFFFFFFF                        |
|                                  | Time of transmission      | Time in $\mu$ s transmitting the values                                      | Uint 32 | 4    | 000000000 -<br>FFFFFFFF                        |
|                                  | Status of digital Inputs  | Low byte represents Input 1  | Uint_ x | 2 x2 | 00 00 all Inputs low<br>00 03 all input high   |
|                                  | Status of digital outputs | Low byte represents Output 1   | Uint_ x | 2 x2 | 00 00 all Outputs low<br>00 07 all Output high |
|                                  | reserved                  |  | uint16  | 2    |  |
| Measurement Parameter            | Scan frequency            | Output in 1/100Hz  | uint 32 | 4    | 2500 25hz<br>5000 50 Hz                        |
|                                  | Measuremen frequency      | Frequenz between each Measurements (in 100Hz)                                | uint 32 | 4    | 00000000h<br>FFFFFFFFh                         |
| Amount of Encoder                |                           |  | enum 8  | 1    | 1 ..3  |
| Encoder                          | Encoder Position          | Info in Ticks  | Uint 32 | 4    | 00000000h<br>FFFFFFFFh                         |
|                                  | Encoder Spees             | Ticks/mm   | uint 16 | 2    | 0000h FFFFh                                    |
| <b>Amount of 16 Bit Channels</b> |                           | Amount of 16 Bit channels, giving out the Messured Data                      | enum 8  | 1    | 1 ..4 Outputchannels                           |

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|                                 |  |  |         |                                       |  |
|---------------------------------|--|--|---------|---------------------------------------|--|
| Outputchannel 1..4 (16Bit)      | Content  | Defines the Content of the Output channel      | string  | 5                                     | DIST1: radial Values of first pulse<br>RSSI1:Energy Values of first pulse<br>DIST2: radial Values of 2nd pulse<br>RSSI2:Energy Values of 2nd pulse |
|                                 | Scale factor   |  | Real    | 4                                     | 00000000..FFFFFFFF   |
|                                 | Scale factor offset                                    | LMS = 0  | Real    | 4                                     | 00000000   |
|                                 | Start angle  | Output format : 1/10.000°                      | int 32  | 4                                     | -550.000 + 1250.000  |
|                                 | Steps  | Output format : 1/10.000°                      | uint16  | 2                                     | 1000 10.000  |
|                                 | Amount of Data   | Defines the number of items om measured output | uint 16 | 2                                     | 0000h<br>FFFFh   |
|                                 | Data_1<br>Data_n                                       | Data stream starting Data_1 to Data_n          | uint 16 | 2                                     | 0000h<br>FFFFh   |
| <b>Amount of 8 Bit Channels</b> | Amount of 8 Bit channels, giving out the Messured Data | enum 8   | 1       | 1 ..4 Outputchannels                  |  |
| Outputchannel 1..4 (16Bit)      | Content  | Defines the Content of the Output channel      | string  | 5                                     | RSSI1:Energy Values of first pulse<br>RSSI2:Energy Values of 2nd pulse   |
|                                 | Scale factor   |  | Real    | 4                                     | 00000000..FFFFFFFF   |
|                                 | Scale factor offset                                    | LMS = 0  | Real    | 4                                     | 00000000   |
|                                 | Start angle  | Output format : 1/10.000°                      | int 32  | 4                                     | -550.000 + 1250.000  |
|                                 | Steps  | Output format : 1/10.000°                      | uint16  | 2                                     | 1000 10.000  |
|                                 | Amount of Data   |  | uint16  | 2                                     | 0000h<br>FFFFh   |
|                                 | Data_1<br>Data_n                                       | Data stream starting Data_1 to Data_n          | uint 8  | 1                                     | 00h<br>FFh   |
| <b>Position</b>                 | Output of Position data?                               | enum 8   | 1       | 0 no position Data<br>1 Position Data |  |
| Position Information            | X Position   | X- Co-ordinate                                 | Real    | 4                                     | 00000000h<br>FFFFFFFFh   |
|                                 | Y Position   | Y- Co-ordinate                                 | Real    | 4                                     | 00000000h<br>FFFFFFFFh   |
|                                 | Z Position   | Z- Co-ordinate                                 | Real    | 4                                     | 00000000h<br>FFFFFFFFh   |
|                                 | X Rotation   | X- Rotation in the Co-ordinate system          | Real    | 4                                     | 00000000h<br>FFFFFFFFh   |
|                                 | Y Rotation   | Y - Rotation in the Co-ordinate system         | Real    | 4                                     | 00000000h<br>FFFFFFFFh   |
|                                 | Z Rotation   | Z - Rotation in the Co-ordinate system         | Real    | 4                                     | 00000000h<br>FFFFFFFFh   |

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|                |                 |                              |        |           |  |
|----------------|-----------------|------------------------------|--------|-----------|--|
|                | Rotations Type  | kind of Rotation             | enum8  | 1         | 0 no rotation<br>1 pitch<br>2 rollin<br>3 free |
| <b>Name</b>    |                 | transmits the Name of device | enum 8 | 1         | 0 no Name<br>1                                 |
|                | Device Name     | 0 to 16 Chars (20h..FFh)     | string | 0 ... 16  |  |
| <b>Comment</b> |                 | transmits a comment          | enum 8 | 1         | 0 no Comment<br>1 comment                      |
|                | Comment content |                              | string | 0 ... 128 |  |

|                   |                  |   |         |   |                              |
|-------------------|------------------|---|---------|---|------------------------------|
| <b>Time</b>       |                  | transmits a time stamp                  | enum 8  | 1 | 0 no time<br>1 time          |
| Time Information  | Year             |   | uint 16 | 2 | 0000h 270Fh                  |
|                   | Month            | 1 to 12                                 | uint8   | 1 | 00h 0Ch                      |
|                   | Day              | Day of Month 1 to 31                    | uint8   | 1 | 00h 1Fh                      |
|                   | Hour             | 0 to 23                                 | uint8   | 1 | 00h 17h                      |
|                   | Minute           | 0 to 59                                 | uint8   | 1 | 00h 38h                      |
|                   | Second           | 0 to 59                                 | uint8   | 1 | 00h 38h                      |
|                   | µ seconds        | 0 to 999.999                            | unit 32 | 4 | 00000000h<br>000F423Fh       |
| <b>Event Info</b> |                  | Give out ifent info?                    | enum 8  | 1 | 0 no Info<br>1 transmit info |
| Event Information | Type             | Fast digital input                      | String  | 4 | FDIN                         |
|                   | Encoder Position | Position of Encoder when event happened | uint 32 | 4 | 00000000h<br>FFFFFFFFh       |
|                   | Time of Event    | Time (µs)of Encoder when event happened | uint 32 | 4 | 00000000h = 0<br>FFFFFFFFh   |
|                   | Angle of Event   | Angle of Encoder when event happened    | int 32  | 4 | -450000 +2250000             |

Workflow to get the scan

- 1 Log in : **sMN SetAccessMode 03 F4724744**
- 2 **Set Scanarea and Resolution**
- 3 **sMN mLMPsetscancfg**
- 4 **sWN LMDscandatacfg 01 00 0 1 0 00 00 0 0 0 1**
- 5 **sMN mEEwriteall**
- 6 **Requist Scan:** sRN LMDscandata OR sEN LMDscandata