



transparent. (D\_F\_F929)

- OS: SG6/7: Oscilloscope: An additional trigger conditions is added. The trigger can be set active if the difference or the absolute difference (only SG6) of the signals between samples are  $\geq$  or  $\leq$  than the trigger level (sort of gradient trigger). (D\_F\_F903)
- OS: SG6: Additional trigger condition for trigger on bitmasks added. (D\_F\_F989).
- OS: SG6: Overrun (OV) interrupt activated in FM04 bus modul to avoid a telegram jam. (D\_F\_B983)
- OS: SG6: MotoLink P+ is supported. This allows a faster communication with the motor on startup. (D\_F\_F996).
- MC: SG 6/7: Phase search once with absolute sensors added. (D\_F\_F962)
- MC: SG6/7: Temp Sens Warn Level parameter (UPID 0x1040): default value set up to 75°C. (D\_F\_F978).
- MC: SG5-7: Force mode for DS402: the units have changed from mm/degree to percent. (D\_F\_F988)
- MC: SG5-7: Range indicator can also be done with boolean parameters or variables. (D\_F\_F982)
- MC: SG6: Force mode for DS402: the units have changed from mm/degree to percent. (D\_F\_F988)
- MC: SG5-7: New incremental motion commands 0xDCx and 0xDDx, with rise and fall trigger parameters as motion parameters added. (D\_F\_F980).
- MC: SG6&7: Limit switch behaviour without resetting the home flag added. New behaviour and parameter added. (D\_F\_F967).
- MC: SG6/7: Closed loop Force Control over MC command. New motion command 0x398x Closed Loop Target Force SG6 added. (D\_F\_F965)
- MC: SG6: EnDat absolute Encoder with Profidrive is supported. (D\_F\_F948).
- MC: SG6: ProfiDriveD phase search first switch on added. (D\_F\_F962).
- MC SG6: New streaming command 0x03Bx modulo streaming for Ethernet IP added. (D\_F\_F949)
- CM: Time stamp in input assembly implemented. (D\_F\_F971).
- CM: CIP Sync Modulo Streaming is supported. (D\_F\_F955).
- CM: Docu: IP sync documentation: Command 0x3Ax added, (D\_F\_D211)
- EC/DS: PDO object 0x1711 with positive and negative torque/force limit added. New ESI Files 1.8.7. (D\_F\_F982)
- EC: Cia402 Closed loop Force Control is called over MC command with new Op Mode -118. (D\_F\_F966)
- EC, DC SG5-7: New variable UPID 213Dh added for showing the time between data receiving and Sync\_0. (D\_F\_F947).
- PL: SG6: Enable overrun interrupt for PE2MAC to enable reconnection after longer operations (e.g. flashing of command table). (D\_F\_F959).
- PD: PD Reference Mark Search 1 added. (D\_F\_F960).
- PD: Reference mark search added. (D\_F\_F958)
- SC SG6: Parameter channel made similar to PROFINET (4x Parameter Channel, 4x Monitoring Channel). (D\_F\_F972).

#### Fixed Bugs:

- LinMot-Talk: did not start up when the internet connection exists but the server is not reachable. Fixed. (D\_L\_B883).
- LinMot-Talk: When defaulting the parameters and closing the motor wizard fast enough, it could have happen, that the parameters were not set to default. Fixed. (D\_L\_B891).
- LinMot-Talk: Small values will be displayed in the scientific format in the parameter view. A change in scientific format was not accepted. Now it is. (D\_L\_B892).
- LinMot-Talk: When closing a second window, LinMot-Talk crashed. Fixed. (D\_L\_B893)
- LinMot-Talk: adf-Files: PnP: After a rotary motor without communication was configured, a motor with PnP will be completely accepted. Changed the way, that the new motor would be regarded as a different type. Fixed. (D\_L\_B886).
- LinMot-Talk: Parameter update did not work reliably because of concurrent tasks. Fixed. (D\_L\_B888).
- LinMot-Talk: Oscilloscope: The Min/Max feature did display even channels which have been turned off. Fixed. (D\_L\_B881).
- LinMot-Talk: When ConfigView.ini is defective, LinMot-Talk doesn't start up. Fixed. (D\_L\_B869)
- LinMot-Talk: MotorWizard: When the coordinate system was changed to reversed, the homing mode pictures were wrong. Fixed. (D\_L\_B875).
- LinMot-Talk: Control Panel: If very small values are typed in (e.g. 0.00001m/s), it will be displayed with 1E-5. When clicking on this box again, an error is generated because the unit doesn't fit. Fixed (D\_L\_B876)
- LinMot-Talk: Motor Wizard: The finish check did not calculate all rotary units correctly. Fixed (D\_L\_B877)
- LinMot-Talk: When login to a SG7 drive with older FW, the device type, serial number and article number will not be displayed correctly. Fixed. (D\_L\_B864).
- LinMot-Talk: When the PC (especially laptop) wakes up from the sleep function, the COM port is not active anymore. Fixed. (D\_L\_B861).
- OS: SG7: OSCl: Trigger greater or equal did not work correctly in any case. Fixed. (D\_F\_B1019).
- OS: PnP: Third pary motors without communication did produce the error "Fatal Err: Bad Motor Comm". Fixed. (D\_F\_B1023).
- OS: SG6: When logged in via RT ETH and the PLC writes RAM parameters, the CT cannot be written in the flash started by the LinMot-Talk. Fixed. (D\_F\_B1007)
- OS: SG7: Serial Number String is read with -2 Bytes Offset from the start of it when adding the info to the login cmd. Fixed. (D\_B\_B971)

- OS SG5-7: When a non PNP motor (of the same type) is plugged after a PNP motor has setup, an error "wrong stator type" was generated. After a second reboot, the error disappeared. Fixed. (D\_F\_B981)
- OS SG6: A timer watchdog error directly restarted the system, without saving the trap information an the remanent memory. Fixed. (D\_F\_B985).
- OS SG6/7: When installing new firmware, the error "Error saving remanent Memory" occurred. Fixed. (D\_F\_B986).
- OS SG7: When starting up without a connected motor, the error "Fatal Error: Bad Motor Comm" was generated. Fixed. (D\_F\_B987).
- MC-SW SG7: Homing with different set A or B did not work. Fixed. (D\_F\_B1014).
- MC-SW SG5-7: After homing the state 7 was entered for one cycle. Fixed, jumps directly to state 8. (D\_F\_B1020).
- MC-SW SG6: generates a wrong stator type when after a PnP motor a non PnP motor is connected. Fixed (D\_F\_B984)
- MC-SW C1400: Sin/Cos offset scale set to 100uV (was 1mV). (D\_F\_B985)
- IP on netX: The name has changed: netX IP SW is now IntfSWIPNX and netX IP Tree is new IntfTriPNX. (D\_F\_B996)
- LinRS SG6: does not work since LT 6.7 Build 201801206. The reason is the automatic baud rate reset in the OS. Fixed. (D\_F\_B1018).
- sercos SG5/6: Torque/Force Feedback Value (S-0-0084) did not display negative values. Fixed. (D\_F\_B1021).
- Command "Wait until Current greather/lower than" does did work for negative values. Fixed. (D\_F\_B1034).



## Build 20181206

Zip-File: 0187-0001\_SW\_6V7\_LinMot-Talk\_6.7\_Build\_20181206.zip

LinMot-Talk 6	Program Version 6.7 Build 20181206
B1100 (SG4) / E1100 (SG3):	Firmware Version 3.25 Build 20181206
E1200 (SG5):	Firmware Version 6.7 Build 20181206
A1100/C1100/I1100 (SG7):	Firmware Version 6.7 Build 20181206
C1200/C1400/E1400 (SG6):	Firmware Version 6.7 Build 20181206

(SGx = System Generation)

### E1200:

Interfaces: CO, DP, DS, EC, IP, LU, PL, PN, RS, SC, SE

Applications: EasySteps, MasterSlave

### E1400:

Interfaces: CO, DP, DS, EC, IP, LU, PD, PL, PN, RS, SC, SE

Applications: EasySteps, MasterSlave

### B8050 / MB8050 ML (MC-Link)

Interfaces: EC, IP, PN, PL, SC

Applications: -

### A1100:

Interfaces: CO

Applications: Autostart, Sinoide

### C1100:

Interfaces: CO, DS, EC, PN, RS, SE

Applications: Autostart, EasySteps

### I1100:

Interfaces: DS, EC, MD, SE

Applications: Autostart, EasySteps

### C1200:

Interfaces: DS, EC, IP, LU, PD, PL, PN, SC, SE, CM

Applications: EasySteps

## Fixed Bugs:

- OS SG6: Stability for firmware installation improved. (D\_F\_B1004)
- LinMot-Talk: Motor wizard: when changing the sensor resolution for rotary motors, the update of the PID values was not done. Fixed. (D\_L\_B878)
- MC-SW: SG5-7: Applying the brake with motion profile DS did not work correctly. Fixed. (D\_F\_B1006)
- Installation: missing GSDML files added. (D\_L\_B873)
- OS SG5/6: Writing a RAM value via parameter service is only performed, when the new value is different from the old one. So the LinMot-Talk does not refresh the parameters all the time. (D\_F\_F976)
- Sercos SG5/6: When writing the bipolar torque limits (S-0-0092) over the SVC, the value was ignored by the MC-SW. Fixed. (D\_F\_B1008)
- MC-SW SG7: The position controller set selection in homing state did not work. Fixed. (D\_F\_B1012).
- LinMot-Talk: FW Installer: If drive hardware is not supported by the firmware installation, because it is too old or too new, the error message is now more precise. (D\_L\_B884)
- LinMot-Talk: FW Installer: Installation from an older version (up to 6.5) did not work properly. Fixed. (D\_F\_B1016).
- A1100: MC-Tree: analog mode did not work properly. The analog source was not handled correctly. Fixed. (D\_F\_B1017).



## Build 20180828

Zip-File: 0187-0001\_SW\_6V7\_LinMot-Talk\_6.7\_Build\_20180828.zip

LinMot-Talk 6	Program Version 6.7 Build 20180828
B1100 (SG4) / E1100 (SG3):	Firmware Version 3.25 Build 20180828
E1200 (SG5):	Firmware Version 6.7 Build 20180828
A1100/C1100/I1100 (SG7):	Firmware Version 6.7 Build 20180828
C1200/C1400/E1400 (SG6):	Firmware Version 6.7 Build 20180828

(SGx = System Generation)

### E1200:

Interfaces: CO, DP, DS, EC, IP, LU, PL, PN, RS, SC, SE

Applications: EasySteps, MasterSlave

### E1400:

Interfaces: CO, DP, DS, EC, IP, LU, PD, PL, PN, RS, SC, SE

Applications: EasySteps, MasterSlave

### B8050 / MB8050 ML (MC-Link)

Interfaces: EC, IP, PN, PL, SC

Applications: -

### A1100:

Interfaces: CO

Applications: Autostart, Sinoide

### C1100:

Interfaces: CO, DS, EC, PN, RS, SE

Applications: Autostart, EasySteps

### I1100:

Interfaces: DS, EC, MD, SE

Applications: Autostart, EasySteps

### C1200:

Interfaces: DS, EC, IP, LU, PD, PL, PN, SC, SE, CM

Applications: EasySteps

## Fixed Bugs:

- LinMot-Talk: Calculation of rotary units, when depending on other parameters, was not correct. Fixed. (D\_L\_B867)
- MC-SW SG6: Modulo behaviour of RS01 and EC02 motors on start up was not identical. Fixed. (MC SW SG6)
- MC-SW SG6: Modulo position after homing was not correct. Fixed. (D\_F\_B989).
- MC-SW SG5: Position indexing per X4.9/X4.10 did not work. Fixed. (D\_F\_B990).
- MC-SW SG5: Homing direction with mode "Home Switch Negative" was not always correct. Fixed. (D\_F\_B991).
- MC-Trees SG5-7: The motor temperature with rotary units had an offset of 50°C (values showed 50°C higher than the reality). Fixed. (D\_L\_B868)
- LinUDP SG6 and Ehternet IP SG6: The communication did not establish, when the server has directly responded to the new DHCP address. Fixed. (D\_F\_B992).
- ADF file for PR01-70: Temperature model parameters adjusted. (D\_L\_B871).
- ADF file for PS01-48x240-XX: Value for force constant corrected. (D\_L\_B872).
- OS-SW SG5/6: When stopping MC-SW via real time interface, on restart the interface can time out while the MC-SW is starting up. Fixed. (D\_F\_B997).
- MC-SW SG7: Delay time of current coupling fixed. (Control behavior improved). (D\_F\_B998).

**Build 20180702****Zip-File: 0187-0001\_SW\_6V7\_LinMot-Talk\_6.7\_Build\_20180702.zip**

LinMot-Talk 6	Program Version 6.7 Build 20180702
B1100 (SG4) / E1100 (SG3):	Firmware Version 3.24 Build 20180702
E1200 (SG5):	Firmware Version 6.7 Build 20180702
A1100/C1100/I1100 (SG7):	Firmware Version 6.7 Build 20180702
C1200/C1400/E1400 (SG6):	Firmware Version 6.7 Build 20180702

(SGx = System Generation)

**E1200:**

Interfaces: CO, DP, DS, EC, IP, LU, PL, PN, RS, SC, SE

Applications: EasySteps, MasterSlave

**E1400:**

Interfaces: CO, DP, DS, EC, IP, LU, PD, PL, PN, RS, SC, SE

Applications: EasySteps, MasterSlave

**B8050 / MB8050 ML (MC-Link)**

Interfaces: EC, IP, PN, PL, SC

Applications: -

**A1100:**

Interfaces: CO

Applications: Autostart, Sinoide

**C1100:**

Interfaces: CO, DS, EC, PN, RS, SE

Applications: Autostart, EasySteps

**I1100:**

Interfaces: DS, EC, MD, SE

Applications: Autostart, EasySteps

**C1200:**

Interfaces: DS, EC, IP, LU, PD, PL, PN, SC, SE, CM

Applications: EasySteps

**Fixed Bugs:**

- SG5: EtherCAT xml-Files: Object 1A12 ind SG5 xml- file missing. Fixed. (D\_F\_D211)
- OS SG5-7: When stopping and restarting the MC-SW via interface, there will be written an error message "Fatal Err: Bad Motor Comm". Fixed. (D\_F\_B966).
- OS SG5 & 6: The oscilloscope has sampled too slow, when running in OS mode. Fixed. (D\_F\_B967)
- MC-SG6: The EnDat error decoding was wrong. Fixed. (D\_F\_B968).
- CM-IP Interface: When too many indications have been received, the mailbox could have been blocked. Fixed (D\_F\_B972)
- Interface IP, CIP Sync: The drive sets the synchronization flag before it really happened. Fixed. (D\_F\_B973)
- EtherCAT: Old xml files have been removed. (D\_F\_F953)
- OS SG7: When logged in with LinMot-Talk and sending the command default MC-SW parameters over the RT bus, it can a trap occur. Byte to byte time out added. Solved. (D\_F\_B974).
- Interface IP, CM: Interface firmware was updated.because of collision between set attribute single and get attribute single. (D\_F\_B975).
- Interface IP, CM: Installation of new firmware did not work, because a flash sector was not erased. Fixed. (D\_F\_B976).
- OS A1100: The RT LEDs did not light up. Port settings set correctly. (D\_F\_B977).



## Build 20180517

Zip-File: 0187-0001\_SW\_6V7\_LinMot-Talk\_6.7\_Build\_20180517.zip

LinMot-Talk 6	Program Version 6.7 Build 20180517
B1100 (SG4) / E1100 (SG3):	Firmware Version 3.24 Build 20180517
E1200 (SG5):	Firmware Version 6.7 Build 20180517
A1100/C1100/I1100 (SG7):	Firmware Version 6.7 Build 20180517
C1200/C1400/E1400 (SG6):	Firmware Version 6.7 Build 20180517

(SGx = System Generation)

### E1200:

Interfaces: CO, DP, DS, EC, IP, LU, PL, PN, RS, SC, SE  
Applications: EasySteps, MasterSlave

### E1400:

Interfaces: CO, DP, DS, EC, IP, LU, PD, PL, PN, RS, SC, SE  
Applications: EasySteps, MasterSlave

### B8050 / MB8050 ML (MC-Link)

Interfaces: EC, IP, PN, PL, SC  
Applications: -

### A1100:

Interfaces: CO  
Applications: Autostart, Sinoide

### C1100:

Interfaces: CO, DS, EC, PN, RS, SE  
Applications: Autostart, EasySteps

### I1100:

Interfaces: DS, EC, MD, SE  
Applications: Autostart, EasySteps

### C1200:

Interfaces: DS, EC, IP, LU, PD, PL, PN, SC, SE, CM  
Applications: EasySteps

## Features:

- MC SW New motion command (388x) «force ctrl inc act pos with force ctrl limit and target force» added. ( F906).
- SG5 Sercos: Sercon100 image updated to Version 2.11 from Version 2.8. (F910)
- LinMot-Talk: Oscilloscope the keyboard buttons y,x,1,2,3,4,5,6,7,8 has functionality by zooming with the mouse wheel, the numbers also by fit view. (F914).
- sercos SG5/6: S-0-0092 (Bipolar torque limit) configurable in RT-Data.  
SG6 only: S-0-0082 and S-0-0083 (Positive and Negative torque limit) added. (F922)
- EC, DS: New telegrams 1613, 1614, 1A12 are similar to telegrams 1603, 1604, 1A02 without OpMode added. (D\_F924)
- OS/LinTalk: Supports higher Baudrates for RS232 Talk-Communication (e.g. 57600, 115200). (D\_F904)
- LinMot-Talk: Message window added. Displays important messages, like motor wizard not done. (D\_L\_F915)
- MC-SW: SG6: Support of position correction tables. (D\_F927)
- MC-SW: SG6: Support of EnDat as encoder. (D\_F928)
- MC-SW: SG6/7: Support of BiSS-B/C (D\_F929).
- MC-SW: SG6/7: Support of SSI for rotary motors. (D\_F930).
- OS SG6/7: An installation counter is added. Each time a firmware installation is done, this counter is incremented. (D\_F\_F934).
- MC SW C1250: A single, periodic reluctance compensation is added for ForceCtrl functionality. LinMot motors and RS01 are supported. (D\_F\_F936).
- MC SW SG5-7: With MC command 382x the Force Ctrl Mode is activated, if it wasn't before. (D\_F\_F937).
- LinMot-Talk: Parameter Inspector: Shows additionally the RAM value. (D\_L\_F927).
- LinMot-Talk: Firmware installation can be done only if the LinMot-Talk version is equal or newer than the actual installed firmware on the drive. (D\_F\_F928)
- OS SG5-7: PnP behaviour changed the way, that a switch from a PnP motor to a non PnP motor is supported. (D\_F\_F935).
- Linmot-Talk: Faulhaber EC and Harmonic Drive FHA C Mini series supported with rotary units. (D\_L\_F925)
- Linmot-Talk: Zoom of channels improved by key combinations (D\_L\_F\_931).
- OS SG6/7: Saving remanent memory speeded up. (Higher loads can be connected on the +5VDC). (D\_F\_F934)

- LinMot-Talk: Motor wizard supports EC-02 motors. (D\_L\_F\_929)
- LinMot-Talk: Motor wizard: Page added for setting the PDI parameters for linear-rotary motors. (D\_L\_F\_930).
- LinMot-Talk: Oscilloscope trigger mode "Change" added. (D\_L\_F934).
- LinMot-Talk: Motor wizard supports change of PR01 linear motor direction. (This feature does not work with motor version V3S1). (D\_L\_F935)

#### **Fixed Bugs:**

- OS SG6: When sending a reset request over RT Ethernet (e.g. Ethernet I/P) the answer was not always correctly sent before the drive resets. Fixed. (B804)
- OS SG6: Lintalk commands via RT ETH that request a longer timeout are missing the second answer after the command is done (e.g. RET\_OK). Fixed. (B805)
- E1250-SE: Drive goes into fatal error state when FW is stopped. Fixed. (B825)
- C1250-IP: when logged in over config ETH over RT, the connection is interrupted, when sending the stop command. Fixed (B827).
- Powerlink SG5 & SG6: EPL-Frames can be read with the wrong start offset from the switch. This leads to misinterpretation of frame content ? All process data (including MC commands and RT config module) can have arbitrary values. Fixed. (B831)
- sercos SG6: Homing via PFC 148 failed after 3rd time. Fixed. (B836)
- SG7: MC SW scaling of speed and acceleration with continuous curve was wrong. Fixed. (B838)
- SG5/6: MC SW VAI motions didn't terminate in every situation. Fixed. (B839)
- SG7: MC SW SG7 motor ActForce was stored in variable MaxForce. Fixed. (B840)
- OS SG6: Command-Table and Curve Service do not work via Lintalk when logged in over RT ETH. Trap when either CS or CT is written to Flash. Fixed. (B852)
- MC SW SG6: The initial position of rotative motors with SSI/BiSS-B/BiSS-C single-turn encoder, which are not homed and powered-up between position U/2 and U (where U is a full turn), is set to U, instead of 0. Fixed. (B854)
- CO-Intf: Cannot be started separately via Run Request Flag. Fixed. (B782)
- SG7: AB sensors with more counts per revolution than 0x10000 did not work, the commutation went wrong. Fixed. (D\_F\_B944).
- Powerlink XDD files generate warnings when importing in B&R AutomationStudio 4.5. Fixed. (D\_F\_B947)
- E1200-SoE : After stopping the firmware, all parameters are read out again. Fixed. (D\_F\_B938).
- SG7: Position Recovery SSI/BiSS with AB sensor did not work. Fixed. (D\_F\_B949)
- OS SG6: The webserver displays the I/O information not correctly. Fixed. (D\_F\_B950).
- OS SG6: The webserver on drive may cause a timer watchdog, if multiple access is done. Fixed. (D\_F\_B951).
- OS SG6: Stop and start over realtime config did not work properly. Fixed. (D\_F\_B952).
- MC SG6/7: When direction is changed via wizard, the homing with absolut sensors did not work properly. Fixed. (D\_F\_B954).
- LinRS SG7: When writing RAM and ROM value via LinRS with Main-ID: 03 and SUB-ID: 04, then only the ROM value was written. Fixed. (D\_F\_B965)

**Build 20180509****Zip-File: 0187-0001\_SW\_6V6\_LinMot-Talk\_6.6\_Build\_20180509.zip**

LinMot-Talk 6                                    Program Version 6.6 Build 20180509  
B1100 (SG4) / E1100 (SG3):                Firmware Version 3.24 Build 20180509  
E1200 (SG5):                                 Firmware Version 6.6 Build 20180509  
A1100/C1100/I1100 (SG7):                 Firmware Version 6.6 Build 20180509  
C1200/C1400/E1400 (SG6):                Firmware Version 6.6 Build 20180509  
(SGx = System Generation)

**E1200:**

Interfaces: CO, DP, DS, EC, IP, LU, PL, PN, RS, SC, SE  
Applications: EasySteps, MasterSlave

**E1400:**

Interfaces: CO, DP, DS, EC, IP, LU, PD, PL, PN, RS, SC, SE  
Applications: EasySteps, MasterSlave

**B8050 / MB8050 ML (MC-Link)**

Interfaces: EC, IP, PN, PL, SC  
Applications: -

**A1100:**

Interfaces: CO  
Applications: Autostart, Sinoide

**C1100:**

Interfaces: CO, DS, EC, PN, RS, SE  
Applications: Autostart, EasySteps

**I1100:**

Interfaces: DS, EC, MD, SE  
Applications: Autostart, EasySteps

**C1200:**

Interfaces: DS, EC, IP, LU, PD, PL, PN, SC, SE  
Applications: EasySteps

**Fixed Bugs:**

- OS SG7: First byte access of serial EEPROM via c-Functions of PSRV failed. Fixed. (D\_F\_B939)
- OS SG6: When installing with connected RT-Bus, erasing of flash can fail with error 0xD6. Fixed. (D\_F\_B940)
- SERCOS SG5/6: Homing procedure PFC-0148 can fail with PVT-Buffer underflow. Fixed. (D\_F\_B941)
- MC SW SG7: AB sensors with higher counts / revision values did not work. A false value was calculated for the commutation length. Fixed. (D\_F\_B944).
- Easy Steps SG6: "Goto Initial Position" did not work in any case. Fixed. (D\_F\_B946)

**Build 20180226****Zip-File: 0187-0001\_SW\_6V6\_LinMot-Talk\_6.6\_Build\_20180226.zip**

LinMot-Talk 6                    Program Version 6.6 Build 20180226  
B1100 (SG4) / E1100 (SG3):    Firmware Version 3.24 Build 20180226  
E1200 (SG5):                    Firmware Version 6.6 Build 20180226  
A1100/C1100/I1100 (SG7):      Firmware Version 6.6 Build 20180226  
C1200/C1400/E1400 (SG6):      Firmware Version 6.6 Build 20180226  
(SGx = System Generation)

**E1200:**

Interfaces: CO, DP, DS, EC, IP, LU, PL, PN, RS, SC, SE  
Applications: EasySteps, MasterSlave

**E1400:**

Interfaces: CO, DP, DS, EC, IP, LU, PD, PL, PN, RS, SC, SE  
Applications: EasySteps, MasterSlave

**B8050 / MB8050 ML (MC-Link)**

Interfaces: EC, IP, PN, PL, SC  
Applications: -

**A1100:**

Interfaces: CO  
Applications: Autostart, Sinoide

**C1100:**

Interfaces: CO, DS, EC, PN, RS, SE  
Applications: Autostart, EasySteps

**I1100:**

Interfaces: DS, EC, MD, SE  
Applications: Autostart, EasySteps

**C1200:**

Interfaces: DS, EC, IP, LU, PD, PL, PN, SC, SE  
Applications: EasySteps

**Fixed Bugs:**

- C1400: MC-SW: IGBT alarm was not locked when STO was active. Fixed. (D\_F\_B930)
- LinMot-Talk: adp-Files: Force constant for 12mm hollow sliders was fixed. (D\_L\_B859).
- MC-SW SG7: Jogging speed was only 0.06m/s. Fixed. (D\_F\_B931).
- OS SG7: When PnP was off, the drive could have stucked on startup. Fixed. (D\_F\_B933).
- New GSDML files for all PN drives to avoid missing "Knotentaufe" with newer Siemens CPU firmwares. (D\_F\_B935)
- IGs: C1100, C1200, C1400, E1400: Maximal cable length information added or made more prominent. (D\_F\_D207).

## Build 20180111

Zip-File: 0187-0001\_SW\_6V6\_LinMot-Talk\_6.6\_Build\_20180111.zip

LinMot-Talk 6	Program Version 6.6 Build 20180111
B1100 (SG4) / E1100 (SG3):	Firmware Version 3.24 Build 20180111
E1200 (SG5):	Firmware Version 6.6 Build 20180111
A1100/C1100/I1100 (SG7):	Firmware Version 6.6 Build 20180111
C1200/C1400/E1400 (SG6):	Firmware Version 6.6 Build 20180111

(SGx = System Generation)

### E1200:

Interfaces: CO, DP, DS, EC, IP, LU, PL, PN, RS, SC, SE

Applications: EasySteps, MasterSlave

### E1400:

Interfaces: CO, DP, DS, EC, IP, LU, PD, PL, PN, RS, SC, SE

Applications: EasySteps, MasterSlave

### B8050 / MB8050 ML (MC-Link)

Interfaces: EC, IP, PN, PL, SC

Applications: -

### A1100:

Interfaces: CO

Applications: Autostart, Sinoide

### C1100:

Interfaces: CO, DS, EC, PN, RS, SE

Applications: Autostart, EasySteps

### I1100:

Interfaces: DS, EC, MD, SE

Applications: Autostart, EasySteps

### C1200:

Interfaces: DS, EC, IP, LU, PD, PL, PN, SC, SE

Applications: EasySteps

## Fixed Bugs:

- MC-SW SG3-7: Phase output frequency increased to 599 Hz. (D\_F\_B924)
- LinMot-Talk: adf-Files: Temperature model parameters for linear motors in LinRot-Motors adjusted. (D\_F\_B925).
- Linmot-Talk: eds-files: EDS file for C1400 was missing. Added. (D\_F\_B926)
- LinMot-Talk: adf-Files: ZP for sliders were wrong. Fixed. (D\_F926)
- OS SG7: State Machine for serial EEPROM may be stucked, when a huge amount of messages are logged. Fixed. (D\_F\_B926).
- MC-SW I1150: Parameter for brake set and release delay time was missing. Added. (D\_F\_B927).
- Install Script:: E1200-PN installation got wrong PN image. Fixed. (D\_L\_B857).

**Build 20171108****Zip-File: 0187-0001\_SW\_6V6\_LinMot-Talk\_6.6\_Build\_20171108.zip**

LinMot-Talk 6	Program Version 6.6 Build 20171108
B1100 (SG4) / E1100 (SG3):	Firmware Version 3.24 Build 20171108
E1200 (SG5):	Firmware Version 6.6 Build 20171108
A1100/C1100/I1100 (SG7):	Firmware Version 6.6 Build 20171108
C1200/C1400/E1400 (SG6):	Firmware Version 6.6 Build 20171108

(SGx = System Generation)

**E1200:**

Interfaces: CO, DP, DS, EC, IP, LU, PL, PN, RS, SC, SE  
Applications: EasySteps, MasterSlave

**E1400:**

Interfaces: CO, DP, DS, EC, IP, LU, PD, PL, PN, RS, SC, SE  
Applications: EasySteps, MasterSlave

**B8050 / MB8050 ML (MC-Link)**

Interfaces: EC, IP, PN, PL, SC  
Applications: -

**A1100:**

Interfaces: CO  
Applications: Autostart, Sinoide

**C1100:**

Interfaces: CO, DS, EC, PN, RS, SE  
Applications: Autostart, EasySteps

**I1100:**

Interfaces: DS, EC, MD, SE  
Applications: Autostart, EasySteps

**C1200:**

Interfaces: DS, EC, IP, LU, PD, PL, PN, SC, SE  
Applications: EasySteps

**Features:**

- Installation: C1400 drives cleaned up (OS and GP removed). (F919)

**Fixed Bugs:**

- LinMot-Talk: Curve tool: auto numerate curves button was invisible, but worked. Fixed. (B851).
- Installation: C1450 V1RF was missing in installation script. Added. (B854)
- MC SW SG6: The initial position of rotative motors with SSI/BiSS-B/BiSS-C single-turn encoder, which are not homed and powered-up between position U/2 and U (where U is a full turn), is set to U, instead of 0. Fixed. (B855)



## Release Information LinMot-Talk 6

### Build 201670522

Zip-File: 0187-0001\_SW\_6V6\_LinMot-Talk\_6.6\_Build\_20170522.zip

LinMot-Talk 6	Program Version 6.6 Build 20170522
B1100 (SG4) / E1100 (SG3):	Firmware Version 3.24 Build 20170522
E1200 (SG5):	Firmware Version 6.6 Build 20170522
A1100/C1100/I1100 (SG7):	Firmware Version 6.6 Build 20170522
C1200/C1400/E1400 (SG6):	Firmware Version 6.6 Build 20170522

(SGx = System Generation)

#### E1200:

Interfaces: CO, DP, DS, EC, IP, LU, PL, PN, RS, SC, SE

Applications: EasySteps, MasterSlave

#### E1400:

Interfaces: CO, DP, DS, EC, IP, LU, PD, PL, PN, RS, SC, SE

Applications: EasySteps, MasterSlave

#### B8050 / MB8050 ML (MC-Link)

Interfaces: EC, IP, PN, PL, SC

Applications: -

#### A1100:

Interfaces: CO

Applications: Autostart, Sinoide

#### C1100:

Interfaces: CO, DS, EC, PN, RS, SE

Applications: Autostart, EasySteps

#### I1100:

Interfaces: DS, EC, MD, SE

Applications: Autostart, EasySteps

#### C1200:

Interfaces: DS, EC, IP, LU, PD, PL, PN, SC, SE

Applications: EasySteps

### Fixed Bugs:

- SG5: Master Slave: MS connection stopped after 10s, when more than 1 slave was connected. Drive goes from Data Exchange to Timeout and recovers. Fixed. (B806).
- SG5 Master Slave: The error messages were not displayed in the decoded representation. There was a problem with the source ID. Fixed. (B807).
- LinMot-Talk: Save Configuration when the new Curves are not downloaded resulted in a freeze of the LinMot-Talk. Fixed (B808).
- LinMot-Talk SG5-7: After using a rotary Motor with rotary units, then plug in a linear motor and config it over the motor wizard, there are still the rotary units active. When defaulting the MC parameters, also the rotary unit parameters in OS (UPIDs 0x0800-0x0808) will be defaulted. Fixed (B810).
- LinMot-Talk SG3-7: Generating the motion command list under manuals results in an access violation because of a missing unit definition. Fixed. (B811).
- Master Slave SG7: Slave position and speed interpolation did not work, because interpolation factor was 0. Fixed. (B813).
- PD SG6/7: Siemens TIg105 Xerr was absolute before. Now it is relative to internal PosDiff. Fixed. (B814)
- LinMot-Talk: Motor Wizard: If a E1200 is selected, no Regeneration Resistor can be selected. Fixed. (B815).
- MC-SW SG7: If position recovery is activated with an absolute sensor and the position limits are used, Min Position (UPID \$146E) is set >0, the drive will produce the error "Min Pos Overshoot" and the home bit will be cleared. Fixed. (B817).
- PD SG6/7: Servo task settings slower than communication task (multiplier) was not possible. Added. (B818).



## Build 201670410

Zip-File: 0187-0001\_SW\_6V6\_LinMot-Talk\_6.6\_Build\_20170410.zip

LinMot-Talk 6	Program Version 6.6 Build 20170410
B1100 (SG4) / E1100 (SG3):	Firmware Version 3.24 Build 20170410
E1200 (SG5):	Firmware Version 6.6 Build 20170410
A1100/C1100/I1100 (SG7):	Firmware Version 6.6 Build 20170410
C1200/C1400/E1400 (SG6):	Firmware Version 6.6 Build 20170410

(SGx = System Generation)

### E1200:

Interfaces: CO, DP, DS, EC, IP, LU, PL, PN, RS, SC, SE  
Applications: EasySteps, MasterSlave

### E1400:

Interfaces: CO, DP, DS, EC, IP, LU, PD, PL, PN, RS, SC, SE  
Applications: EasySteps, MasterSlave

### B8050 / MB8050 ML (MC-Link)

Interfaces: EC, IP, PN, PL, SC  
Applications: -

### A1100:

Interfaces: CO  
Applications: Autostart, Sinoide

### C1100:

Interfaces: CO, DS, EC, PN, RS, SE  
Applications: Autostart, EasySteps

### I1100:

Interfaces: DS, EC, MD, SE  
Applications: Autostart, EasySteps

### C1200:

Interfaces: DS, EC, IP, LU, PD, PL, PN, SC, SE  
Applications: EasySteps

## Features:

- MC-SW SG6 (C1200): Modulo for rotative motors added with three modes: VAI Modulo Go To Pos Positive Direction (3C0xh), Negative Direction (3C1xh) and Shortest Way (3C2xh). (F646)
- PD SG6: Following error at higher speeds. Death time, with Siemens controller. (F789)
- MC-SW: SG6 (except C1400): BiSS-B and BiSS-C. (F805)
- MC-SW: SG6: Min. Temp limit with KTY sensors SW added. (F807)
- SG6&7 support of KTY84 and PT1000 Motor temp sensors on X3. (F810)
- MC-SW: SG6/7: PD Support of Siemens TDB added. (F811)
- MC-SW: SG6/7: Support of Regeneration in Motor. (F812)
- POWERLINK SG5/6: RX-Queue of Powerlink MAC enhanced to be able to buffer more frames before an overrun occurs. (F815)
- OS SG5-7: OSCI: Trigger condition "Not Equal" added. (F825)
- Sercos: SG6: Config over RT Bus added. (F826)
- OS SG5-7: Check added for how much time there is left after Remanent block is safed. If the time is too low, an nonfatal error will be generated. (F830)
- MC-SW: Brake function: Drive brake only with enable. Add apply delay time (Add check box). (F831)
- SG5, MC-SW: Make variables "Winding Application" visible for user. (F834)
- EPL SG5/6: MCSW Task synchronized to SoC to eliminate beat effects between interface data evaluation in the PLC and the drive. Timestamp jitter for streaming improved. (F837)
- MC-SW: Add command: like 016xh with reset I accumulator. Command: 0x00Ax. (F840)
- MC-SW: Add command Set Dem Pos = Act Pos and reset I accumulator Command: 0x0D9x. (F841)
- MC-SW: Dead time compensation for 3phase motors added. (F842).
- LinMot-Talk: adp files for stator programming version V3S2 added. (F844).
- sercos SG5/SG6: Implemented GDP\_RST (IDN S-0-1350) to reboot the device. (F848)
- MC-SW SG5-7: Command 0x00Ex "Reconnect Motor" added. (F850).
- MC-SW SG5-7: Command 0x00Dx "Disconnect Motor" added. (F851)
- MC-SW SG6: Force Control: FF Friction (UPID 0x150B) and FF Acceleration (UPID 0x150C) added. (F853).
- Sercos SG5/6: Start of MCSW-Tasks is now synchronized to reception of MDT-Telegrams. (F857)
- LinMot-Talk: Wizard supports BiSS encoders. (F858)
- LinMot-Talk: MDF-Generator: Another window added to define a list with additional UPIDs and values to be set. (F875)

- EtherNet/IP: The receive procedure is managed by interrupt. The jitter is smaller and is more robust for broadcast traffic. (F879)
- LinMot-Talk: Support of rotary units added. (F881)
- OS: SG5/6: State machine changed. Before MC-SW is started, the PnP setup is always done. This avoids the error message "Wrong Stator Type" when configured over the RT bus and no reboot is done. (F882)
- SG7: Appl Gantry Master Slave via CAN added. (F891)

#### Fixed Bugs:

- CANOpen SG7: COB-Ids of TXPDOs and RXPDOs (e.g. Object 0x1400sub1) cannot be changed via SDO access. Fixed. (B728)
- PN Input size of Get Actual Position in GSDML-file was 2 bytes instead of 4 bytes. Fixed. (B729)
- OS SG5: Intf Trees could not be downloaded via Lintalk. Fixed. (B731)
- B1100: MC-SW: EC motors may turn in the wrong direction when jog moves are executed. Fixed (B734).
- LinUDP\_V2 SG5 when the MC Software is stopped after a short time LinUDP loose the connection. Fixed (B740).
- SG6: After a flash access, a timer struggle message was shown and logged. This was a false alarm. Fixed. (B741)
- SG6: Installation may result in timeout and no communication is possible anymore. (Problem with flash lock). Fixed. (B742)
- SG7: MC-SW: In two phase model, the temp calculated error on phase 2 does not turn off the motor. This problem exists since version 6.5. Fixed (B743)
- SG7: LinRS: Sending of packets sometimes stops. The driver output enable may be disabled unintentionally. Fixed. (B745)
- SG7: LinRS: Parameter "Time Out" (UPID 208Bh) had no influence. Fixed. (B747)
- C1150-DS-1S: Parameter "Periods per Revolution" (UPID 11ECh) was missing. The motor wizard in LinMot-Talk ended up with a division by zero error. Fixed. (B749)
- PL SG5/6: Default Value and Calculation of Object 1F98 sub05 (PResActPayloadLimit) were incorrect. Fixed. (B750)
- PL SG5/6: Peaks to maximum value of Demandposition while P-Streaming and PVT Buffer Errors when setting the tolerance to 0 fixed --> Timestamping is now done in MCSW Cyclic Function. Fixed. (B751)
- MC-SW SG5: Default value of parameter "Phase Voltage Low Level" (UPID 0x102C) set to 2.54V. (B752)
- Motor data: adf/adp-Files: Short time overload model parameters (C Winding (UPID 0x122A) and R Winding-Sensor (UPID 0x122B)) for 37Sx60 and 48x360 motors corrected. (B754)
- MC-SW: SG7: When brake is activated and Noise Dead Band is active, the demand current was not set to 0A, even when Maximal Current is set to 0A. Fixed. (B756).
- MC-SW: SG7: Brake apply delay time is only 1/2 of the correct value. (B758)
- EDS-File for C1250-IP-XC-0S had not the correct datatype. It did not function with the Add on instruction. (B759)
- OS SG7: Application parameter tree values are not correct. UPIDs 0x058C, 0x05A0, 0x05A. Fixed. (B762)
- OS SG6 C1250: TCP Frames received over RT Ethernet led to a trap because tcpip\_init() was only executed on E1400 series drives. (B763)
- SG6, VAJI Increment Act Pos Starting with Dem Vel = 0 and Dem Acc = 0 (346xh): As soon as a rotative motor moves from +210000mm to -210000mm (or another increment command over the INT32 range), the motor changes the direction and turns all back to -210000mm. Fixed. (B765)
- SG5&6: OS: Start MC-SW from interface results in a trap, when MC is already running. Fixed. (B766)
- OS: GetErrorMsgStringLet did not work for MC and INTF messages. Error messages could not be displayed correctly over the RT bus. Fixed. (B767).
- MC SW SG6: Commands 3AAxh, 3ABxh, 3ACxh, 3ADxh, 3BAxh, 3BBxh, 3BCxh, 3BDxh had wrong parameters. Fixed. (B768)
- LinRS: Byte to byte time out bug fixed. Time out counter was also running in idle state. Fixed. (B769)
- sercos SG5/SG6: Duration of IP-Window during RT-Traffic increased. A lack of throughput could result in Indra-Drives not being able to update their firmware correctly. Fixed (B770).
- OS SG5/6: Port access to LED pins made uninterruptable. Problems with LinRS driver cannot occur anymore. (B771)
- OS: OSCI: UINT8 or SINT8 types with odd address could not be sampled. Fixed (B773).
- EasySteps SG7: Autostart mode did not work (only problem in 6.6 20170104-IM) Only temporary problem with new switch on sequence (adaption to C1200). Fixed (B775).
- OS SG7: When writing ROM bit parameters, it could happen, that other bits in the same word or byte are altered. Fixed. (B777)
- OS: SG7: Several deleting and writing of curves destroys Command table. Fixed. (B779)
- LinRS SG6/SG4: Checksum calculation in mode "Add" was wrong. Start Value was always assumed as 0000h. Fixed. (B780)
- Oscilloscope SG6: Trigger on STO input did not work. Fixed. (B781)
- LinMot-Talk: Voltage enable set over X4.6 in 0S-Drives did not affect Voltage Enable flag. Fixed. (B783)
- LinMot-Talk: When motor PS01-23x80 is selected, and slider PL01-12x130/90-LC, the slider was not stored in the wizard. Fixed. (B784)
- EtherNet/IP: If a message is received, which looks like forward open but shorter, then the sequence number was set back to 0, which caused a Realtime IO Timeout. Fixed. (B785)

- MC-SW: (E1100): If "Jogging Mode" is set to "Speed Limited Move", only positive direction works. In negative direction nothing happens. Fixed. (B789)
- PN SG6: Bus timing improved. Very rarely wrong data was loaded. Fixed. (B790).
- sercos SG5: Erronous sercos error counter fixed. The counter incremented even if there was no real error. Fixed. (B791)
- sercos SG5/6: initiating Homing via Interface while drive is operational could lead to error "Motion Command in Wrong State". Fixed. (B792)
- SG3: MasterSlave Application E1100: Source ID in tree corrected from 1002h to 2001h. Error descriptions in the error log when read with LinMot-Talk are now correct. Fixed. (B793)
- SoE: Homing with Home Switch Positiv does not work properly. Fixed. (B794).
- SG7: MC-SW: VAI infinite motion could start with wrong start values (Problem homing SoE). Fixed. (B795)
- PLC does not receive those in time and resets the drive again and again. Fixed. (B796)
- CANOpen SG6: Timing for Errorcontrol and sync monitoring fixed (250us and not 200us MC-cycle). Fixed. (B797)
- LinMot-Talk: Stop script did not work. Fixed. (B799)
- MC-SW SG6: EncoderSimulation on E1400 did not work. Fixed. (B800)
- MC-SW: SG7: For rotary motors one revolution could only be defined as 36mm. Fixed. (B802)

**Build 20160927****Zip-File: 0187-0001\_SW\_6V5\_LinMot-Talk\_6.5\_Build\_20160927.zip**

LinMot-Talk 6	Version 6.5	Build 20160927
B1100/E1100 Series Firmware:	Version 3.23	Build 20160927
E1200 Series Firmware:	Version 6.5	Build 20160927
A1100/C1100 Series Firmware:	Version 6.5	Build 20160927
C1200/C1400/E1400 Series Firmware:	Version 6.5	Build 20160927

**E1200:**

Interfaces: CO, DP, DS, EC, IP, LU, PL, PN, RS, SC, SE  
Applications: EasySteps, MasterSlave

**E1400:**

Interfaces: CO, DP, DS, EC, IP, LU, PD, PL, PN, RS, SC, SE  
Applications: EasySteps, MasterSlave

**B8050 / MB8050 ML (MC-Link)**

Interfaces: EC, IP, PN, PL, SC  
Applications: -

**A1100:**

Interfaces: CO  
Applications: Autostart, Sinoide

**C1100:**

Interfaces: CO, DS, EC, PD, PN, RS  
Applications: Autostart, EasySteps

**C1200:**

Interfaces: DS, EC, IP, LU, PD, PL, PN, SC, SE  
Applications: EasySteps

**Features:**

- LinMot-Talk: ADP files version 3.2 added. (F817)

**Fixed Bugs:**

- Ethernet-IP: SG5/6: Less Calc Time C1 occurred. Fixed. (B714)
- LinMot-Talk: Saving configurations from offline Drives was not possible. Fixed. (B732)
- B8050: Ethernet IP communication timeout occurred. Fixed. (B733)
- C1250: Show IP Address incorrect by save configuration over Realtime. Fixed. (B737)
- LinMot-Talk: When connection lost, the configuration saved had no data. Fixed. (B738).

**Build 20160711****Zip-File: 0187-0001\_SW\_6V5\_LinMot-Talk\_6.5\_Build\_20160711.zip**

LinMot-Talk 6	Version 6.5	Build 20160711
B1100/E1100 Series Firmware:	Version 3.23	Build 20160711
E1200 Series Firmware:	Version 6.5	Build 20160711
A1100/C1100 Series Firmware:	Version 6.5	Build 20160711
C1200/C1400/E1400 Series Firmware:	Version 6.5	Build 20160711

**E1200:**

Interfaces: CO, DP, DS, EC, IP, LU, PL, PN, RS, SC, SE  
Applications: EasySteps, MasterSlave

**E1400:**

Interfaces: CO, DP, DS, EC, IP, LU, PD, PL, PN, RS, SC, SE  
Applications: EasySteps, MasterSlave

**B8050 / MB8050 ML (MC-Link)**

Interfaces: EC, IP, PN, PL, SC  
Applications: -

**A1100:**

Interfaces: CO  
Applications: Autostart, Sinoide

**C1100:**

Interfaces: CO, DS, EC, PD, PN, RS  
Applications: Autostart, EasySteps

**C1200:**

Interfaces: DS, EC, IP, LU, PD, PL, PN, SC, SE  
Applications: EasySteps

**Features:**

- MC-SW: SG5-7: Before HW tests demand position is set to actual position. (F807).

**Fixed Bugs:**

- SG7: Timer Watch Dog Error when writing CT or curves to flash via interface. Since Build 20160325. Fixed. (B719)
- E1400 and C1400 Switch on Current limit (UPID 0X102F) increased to 1A (B720)
- E1100 and B1100 Switch on Phase Voltage low limit (UPID 0X102C) decreased to 2.5V. (B721)
- SG7: CO: Writing CT entries via SDO did not work correctly. Fixed. (B723)
- SG5-7: LinRS: Various length in default response. Fixed. (B726)

**Build 20160622-IM****Zip-File: 0187-0001\_SW\_6V5\_LinMot-Talk\_6.5\_Build\_20160622c-IM.zip**

LinMot-Talk 6	Version 6.5	Build 20160622-IM
B1100/E1100 Series Firmware:	Version 3.23	Build 20160622-IM
E1200 Series Firmware:	Version 6.5	Build 20160622-IM
A1100/C1100 Series Firmware:	Version 6.5	Build 20160622-IM
C1200/C1400/E1400 Series Firmware:	Version 6.5	Build 20160622-IM

**E1200:**

Interfaces: CO, DP, DS, EC, IP, LU, PL, PN, RS, SC, SE  
Applications: EasySteps, MasterSlave

**E1400:**

Interfaces: CO, DP, DS, EC, IP, LU, PD, PL, PN, RS, SC, SE  
Applications: EasySteps, MasterSlave

**B8050 / MB8050 ML (MC-Link)**

Interfaces: EC, IP, PN, PL, SC  
Applications: -

**A1100:**

Interfaces: CO  
Applications: Autostart, Sinoide

**C1100:**

Interfaces: CO, DS, EC, PD, PN, RS  
Applications: Autostart, EasySteps

**C1200:**

Interfaces: DS, EC, IP, LU, PD, PL, PN, SC, SE  
Applications: EasySteps

**Features:**

- OS SG5-7: PnP Only parameters from UPID list, which are not defined with new motor will be set to default. The motor parameter buffer on drive side will be defaulted first. (F799)
- CANOpen SG7: Baudrate Autodetection implemented. (F803)

**Fixed Bugs:**

- E1100: Hall Switch W on X3 is not read in. (Wrong Port direction). Fixed. (B717)

**Documents:**

- German installation guides for C1100 and C1200 added. (D192)

## Build 20160613-IM

LinMot-Talk 6	Version 6.5	Build 20160613-IM
B1100/E1100 Series Firmware:	Version 3.22	Build 20150416
E1200 Series Firmware:	Version 6.5	Build 20160613-IM
A1100/C1100 Series Firmware:	Version 6.5	Build 20160613-IM
C1200/C1400/E1400 Series Firmware:	Version 6.5	Build 20160613-IM

### E1200:

Interfaces: CO, DP, DS, EC, IP, LU, PL, PN, RS, SC, SE  
Applications: EasySteps, MasterSlave

### E1400:

Interfaces: CO, DP, DS, EC, IP, LU, PD, PL, PN, RS, SC, SE  
Applications: EasySteps, MasterSlave

### B8050 / MB8050 ML (MC-Link)

Interfaces: EC, IP, PN, PL, SC  
Applications: -

### A1100:

Interfaces: CO  
Applications: Autostart, Sinoide

### C1100:

Interfaces: CO, DS, EC, PD, PN, RS  
Applications: Autostart, EasySteps

### C1200:

Interfaces: DS, EC, IP, LU, PD, PL, PN, SC, SE  
Applications: EasySteps

(Interface key: CO: CANopen, DP: Profibus DP, DS: EtherCAT CoE, EC: EtherCAT, IP: Ethernet IP, LU: LinUDP, PL: PowerLink, PN: PROFINET, RS: LinRS, SC: sercos, SE: EtherCAT CoE)

## Features:

- SG6, SG7: Phase Search with minimal movement. (F698)
- SG7: SSI supported during operation (additional to position recovery) for linear motors. (F775)
- E1400 PTC, KTY and PT1000 Evaluation on X2 implemented. (F795)
- SG6: MC-SW: Command „Mod. Command Table 32/16Bit“ added. (F796)

## Fixed Bugs:

- SG5/SG6: Master Slave: On a restart of one drive, the MS communication is lost. Fixed. (B713)
- E1400 V2 Master encoder on X10 didn't work. Fixed. (B715)
- E1400 V2 Encoder simulation didn't work. Fixed. (B716)

## Build 20160517-IM

LinMot-Talk 6	Version 6.5	Build 20160517-IM
B1100/E1100 Series Firmware:	Version 3.22	Build 20150416
E1200 Series Firmware:	Version 6.5	Build 20160517-IM
A1100/C1100 Series Firmware:	Version 6.5	Build 20160517-IM
C1200/C1400/E1400 Series Firmware:	Version 6.5	Build 20160517-IM

### E1200/E1400: Supported Interfaces:

Ethernet IP, PowerLink, EtherCAT, LinRS, CANopen, ProfibusDP, sercos, sercos over EtherCAT, CANopen over EtherCAT, LinUDP, LinUDPV2, PROFINET, DS402 over EtherCAT

### B8050 / MB8050 ML (MC-Link) Supported Interfaces:

PowerLink, EtherCAT, EthernetIP, sercos, PROFINET

### A1100: Supported Interfaces:

CANopen

### C1100: Supported Interfaces:

CANopen, EtherCAT, PROFINET, DS402 over EtherCAT, PROFdrive

### C1200: Supported Interfaces:

EtherCAT, EthernetIP, PowerLink, LinUDPV2, PROFINET, sercos, sercos over EtherCAT, DS402 over EtherCAT, PROFdrive

## Features:

- LinMot-Talk: Save / Load workspace configurations. Multiple drive configurations can be stored and loaded together. So a complete machine configuration stays consistent. (F415)
- POWERLINK SG5: CN asynchronous reaction time optimized from ~100us down to ~10us. (F784)
- Installation Guides: Declaration of Conformity CE-Marking updated according to new directives.

## Fixed Bugs:

- SG7: OS: Address of monitoring variables used in MC-SW, defined by UPIDs, may be wrong. Fixed. (B703)
- PN SG5: If Flash operations (e.g. write curves to flash) are executed, the Profinet Interface stops working -> TPS-1 watchdog was not toggled during flash operations. Fixed (B704).
- SG7: If invalid UPIDs are used as a value to configure other parameters (e.g. Range indicator 1 Minuend UPID) in LinMot-Talk, the drive does not start up anymore and a SW trap occurs. Fixed. (B705).
- E1400-V2: Master encoder on X13 does not work. Fixed. (B706)
- MC-SW A1100: Temperature parameter scaling was wrong. Fixed. (B707)
- Sercos SG5/6: If the SVC channel is mapped in a different AT/MDT than the rest of the data, the SVC channel does not work. Fixed. (B709)
- EthernetIP: MCSW stopping fieldbus does not work with RPI 1ms. Fixed (B710)
- LinUDP: write UPID, the Drive does not answer on the first request, after the second request it works normal. Fixed. (B711)
- MC-SW E1400: Masterencoder: both sources X10 and X13 are not processed. The counter stays at 0 and the position indexer does not work. Fixed. (B712).

## Build 20160325-IM

LinMot-Talk 6

Version 6.5 Build 20160325-IM



B1100/E1100 Series Firmware: Version 3.22 Build 20150416  
E1200 Series Firmware: Version 6.5 Build 20160325-IM  
A1100/C1100 Series Firmware: Version 6.5 Build 20160325-IM  
C1200/C1400/E1400 Series Firmware: Version 6.5 Build 20160325-IM

**E1200/E1400: Supported Interfaces:**

Ethernet IP, PowerLink, EtherCAT, LinRS, CANopen, ProfibusDP, sercos,  
sercos over EtherCAT, CANopen over EtherCAT, LinUDP, LinUDPV2, PROFINET, DS402 over EtherCAT

**B8050 / MB8050 ML (MC-Link) Supported Interfaces:**

PowerLink, EtherCAT, EthernetIP, sercos, PROFINET

**A1100: Supported Interfaces:**

CANopen

**C1100: Supported Interfaces:**

CANopen, EtherCAT, PROFINET, DS402 over EtherCAT, PROFIdrive

**C1200: Supported Interfaces:**

EtherCAT, EthernetIP, PowerLink, LinUDPV2, PROFINET, sercos, sercos over EtherCAT,  
DS402 over EtherCAT, PROFIdrive

**Features:**

- MC-SW: (SG7) Predef VAI Increment Act Pos by Cmd Tab Var1 added. (0D2xh)

**Fixed Bugs:**

- OS SG7: Login not possible after a trap or wdt occurs. LED Pattern to indicate the different kinds of traps does not work correctly. Fixed. (B694).

- OS SG7: (Infineon Errata PVC\_X.H001): PVC Threshold Level 2 interrupt: Due to variations of the tolerance of both the Embedded Voltage Regulators (EVR) in the CPU, this interrupt can be triggered inadvertently, even though the core voltage is within the normal range. This leads to a Trap since this interrupt triggers the same source as the timer watchdog. The user sees a timer watchdog error entry in the error log even though the reason was a different one. Fixed. (B697)

- EasyStep SG7 didn't work in 6.5 IM build. Fixed. (B698)

- E1250-SE the Velocity command value in MDT 1 did not work in Build 6.4. Fixed. (B699)

- C1250 Easy Steps analog Parameter Scale on differential channel fixed. (B701)

- LinMot-Talk: Control Panel: Display of digital outputs on A1100 fixed. (B702)

## **Build 20160222-IM**

LinMot-Talk 6	Version 6.5	Build 20160222-IM
B1100/E1100 Series Firmware:	Version 3.22	Build 20150416
E1200 Series Firmware:	Version 6.5	Build 20160222-IM
A1100/C1100 Series Firmware:	Version 6.5	Build 20160222-IM
C1200/C1400/E1400 Series Firmware:	Version 6.5	Build 20160222-IM

### E1200/E1400: Supported Interfaces:

Ethernet IP, PowerLink, EtherCAT, LinRS, CANopen, ProfibusDP, sercos, sercos over EtherCAT, CANopen over EtherCAT, LinUDP, LinUDPV2, PROFINET, DS402 over EtherCAT

### B8050 / MB8050 ML (MC-Link) Supported Interfaces:

PowerLink, EtherCAT, EthernetIP, sercos, PROFINET

### A1100: Supported Interfaces:

CANopen

### C1100: Supported Interfaces:

CANopen, EtherCAT, PROFINET, DS402 over EtherCAT, PROFIdrive

### C1200: Supported Interfaces:

EtherCAT, EthernetIP, PowerLink, LinUDPV2, PROFINET, sercos, sercos over EtherCAT, DS402 over EtherCAT, PROFIdrive

## **Features:**

- POWERLINK SG6: CN asynchronous reaction time optimized from ~100us down to ~1us. (F778)
- EC02 ADP Files added. (F781)
- EC02 running with C1100, C1200, E1200. (F782)

## **Fixed Bugs:**

- EC:SG5 and SG6: NC –In/Out fixed with new XML. (B690).
- B8050-ML-IP: RT Communication did not work with Build 6.4. Fixed. (B691)
- SG7 DiagLivePar was not called in IM 6.5. (B692)
- SG7 Hall cross coupling compensation fixed. (B693)

## Build 201600201-IM

LinMot-Talk 6	Version 6.5	Build 20160201-IM
B1100/E1100 Series Firmware:	Version 3.22	Build 20150416
E1200 Series Firmware:	Version 6.5	Build 20160201-IM
A1100/C1100 Series Firmware:	Version 6.5	Build 20160201-IM
C1200/C1400/E1400 Series Firmware:	Version 6.5	Build 20160201-IM

### E1200/E1400: Supported Interfaces:

Ethernet IP, PowerLink, EtherCAT, LinRS, CANopen, ProfibusDP, sercos, sercos over EtherCAT, CANopen over EtherCAT, LinUDP, LinUDPV2, PROFINET, DS402 over EtherCAT

### B8050 / MB8050 ML (MC-Link) Supported Interfaces:

PowerLink, EtherCAT, EthernetIP, sercos, PROFINET

### A1100: Supported Interfaces:

CANopen

### C1100: Supported Interfaces:

CANopen, EtherCAT, PROFINET, DS402 over EtherCAT, PROFIdrive

### C1200: Supported Interfaces:

EtherCAT, EthernetIP, PowerLink, LinUDPV2, PROFINET, sercos, sercos over EtherCAT, DS402 over EtherCAT, PROFIdrive

## Features:

- Sercos SG5/6: Procedure Function Command S-0-0262 Load defaults implemented. (F766)
- EC SoE expanding PDO data with any UPID of 16 or 32 bit data size. (F767)
- MC-Tree: Captions for UPID 0x11DB changed from "Positive" to "Cosine before Sine" and from "Negative" to "Sine before Cosine". (F769)
- SG7 Support Sin/Cos Motor position with IFFT 2 Arctan table. (F770).
- SG6: CFG ETH with PN and PD. (F772)
- SG6: SSI supported during operation (additional to position recovery) for linear motors. (F774)

## Fixed Bugs:

- CANopen SG5/6: If a SDO-Abort Transfer request message is sent from the PLC, the drive does not respond anymore to further SDO Requests. Fixed (B688).
- MC-SW SG5/6: 32 bit overflow with sine and besthorn motions fixed. (B689)

## Build 20160112-IM

LinMot-Talk 6	Version 6.5	Build 20160112-IM
B1100/E1100 Series Firmware:	Version 3.22	Build 20150416
E1200 Series Firmware:	Version 6.5	Build 20160112-IM
A1100/C1100 Series Firmware:	Version 6.5	Build 20160112-IM
C1200/C1400/E1400 Series Firmware:	Version 6.5	Build 20160112-IM

### E1200/E1400: Supported Interfaces:

Ethernet IP, PowerLink, EtherCAT, LinRS, CANopen, ProfibusDP, sercos, sercos over EtherCAT, CANopen over EtherCAT, LinUDP, LinUDPV2, PROFINET, DS402 over EtherCAT

### B8050 / MB8050 ML (MC-Link) Supported Interfaces:

PowerLink, EtherCAT, EthernetIP, sercos, PROFINET

### A1100: Supported Interfaces:

CANopen

### C1100: Supported Interfaces:

CANopen, EtherCAT, PROFINET, DS402 over EtherCAT, PROFIdrive

### C1200: Supported Interfaces:

EtherCAT, EthernetIP, PowerLink, LinUDPV2, PROFINET, sercos, sercos over EtherCAT, DS402 over EtherCAT, PROFIdrive

**Features:**

- ProfiDrive: Velocity watch added. Result is stored in Warn Word bit 11. (F757)
- ProfiDrive: Torque limit positive, negative: Two limits are added (the older limit still exist). The torque watch works with the lower of the two values. (F759)
- EC02: On power on, the motor position is zero plus the actual angle. The angle offset is stored on the motor. (F761)

**Fixed Bugs:**

- SG7: A1100/C1100: Curve Service: Write Curves with Ids 9..16, 25..32 etc. did not work. Fixed (B677)
- SG6 Sercos: Problem of variable mislocation. Can lead to other problems. Fixed (B678)
- C1150-EC: As soon as PDO Mapping „NC Inputs“ and „NC Outputs“ are selected on the master, the drive switches to „Error Pre-Operational State“. Fixed (B679)
- SG5/SG6: Installation over Config ETHERNET: When the default IP Address is selected, it was not possible to install on a second drive. Fixed (B680).
- LinMot-Talk: When the first user defined variable is deleted and then double click on the next variable, an address error is generated. Fixed (B681)
- SERCOS: Data exchange when more than one telegram is sent (if number of bus nodes is very high) may be faulty. Fixed. (B683)
- MC-SW: SG7: Bugfix reading differential hall switch W input. Was mapped to single ended hall switch W input. Fixed. (B684)
- SG5/6 Sercos: Only AT0/MDT0 telegrams work. If Data is placed in AT1-3/MDT1-3 the drive is unable to get to CP4. Fixed (B685)
- SG5/6 Sercos: Timing optimised in RT Data handling. Handling the data too late can lead to corrupted telgrams (alignement errors) with image version 2.8 of the sercon100. Fixed (B686)
- SG5/6 Sercos: Ring recovery can lead to missed telegrams. Fixed (B687)