

CAN COMMUNICATION SPECIFICATION

TABLE OF CONTENTS

1	REVISION HISTORY	2
2	GENERAL	3
2.1	SCOPE	3
3	PHYSICAL LAYER SPECIFICATIONS	3
3.1	CONFIGURATION	3
3.1.1	BAUDRATE	3
3.1.2	NODE ID	3
4	DEVICE DICTIONARY	4
4.1	OVERVIEW	4
4.2	OBJECT ENTRY DESCRIPTIONS OF COMMUNICATION PROFILE	5
4.2.1	DEVICE TYPE	5
4.2.2	ERROR REGISTER	5
4.2.3	PRE-DEFINED ERROR FIELD	5
4.2.4	COB-ID SYNC	6
4.2.5	MANUFACTURER DEVICE NAME	6
4.2.6	MANUFACTURER SOFTWARE VERSION	6
4.2.7	STORE PARAMETERS	6
4.2.8	RESTORE PARAMETERS	7
4.2.9	COB-ID EMCY	8
4.2.10	INHIBIT TIME EMCY	8
4.2.11	PRODUCER HEARTBEAT TIME	9
4.2.12	IDENTITY OBJECT	10
4.2.13	RPDO _n COMMUNICATION PARAMETERS	11
4.2.14	RPDO _n MAPPING PARAMETERS	11
4.2.15	TPDO _n COMMUNICATION PARAMETERS	12
4.2.16	TPDO _n MAPPING PARAMETERS	14
4.3	OBJECT ENTRY DESCRIPTIONS OF MANUFACTURER SPECIFIC OBJECTS	15
4.3.1	CONTROL VALUES	15
4.3.2	MEASUREMENT VALUES	15
4.3.3	SHORT CONTROL VALUES	17
4.3.4	SHORT MEASUREMENT VALUES	19
4.3.5	CALIBRATION DATA	19
4.3.6	CONFIGURATION DATA	23
4.3.7	PRODUCTION DATA	26
5	MANUFACTURER SPECIFIC ERRORS	28

1 REVISION HISTORY

Revision	Date	Change description	Change resp
A	2026-01-08	First revision, document created	EN
B	2026-04-29	Added MSEF error description	EN

2 GENERAL

2.1 SCOPE

This specification covers the CANOpen communication for project 10384.

3 PHYSICAL LAYER SPECIFICATIONS

3.1 CONFIGURATION

The CANOpen interface is configurable in both baudrate and NodeID. Configuration writes to NodeID and baudrate does not take effect until next reset.

3.1.1 BAUDRATE

CAN Baudrate is settable to 20, 50, 125, 250 and 500 kbit/s

3.1.2 NODE ID

NodeID is settable between 1 and 0x7F

4 DEVICE DICTIONARY

4.1 OVERVIEW

SDO ID	Object Name	Description	Access
0x1000	Device Type	Logical device information	R
0x1001	Error Register	Error information register	R
0x1003	Pre-defined Error field	Error history	RW
0x1005	COB-ID SYNC	SYNC COB-ID definition	R
0x1008	Manufacturer device name	Name given by manufacturer	R
0x100A	Manufacturer SW version	Software version information	R
0x1010	Store Parameters	Provides possibility of storing parameters	RW
0x1011	Restore default parameters	Restores default parameters	RW
0x1014	COB-ID EMCY	EMCY COB-ID definition	R
0x1015	EMCY inhibit time	Defines the minimum time interval that EMCY messages can be sent with	RW
0x1017	Producer heartbeat time	Defines the timing of produced heartbeat messages	RW
0x1018	Identity Object	Identification data for the device	R
0x1400	RPDO1 communication parameter	Receive PDO communication parameter	RW
0x1401	RPDO2 communication parameter	Receive PDO communication parameter	RW
0x1402	RPDO3 communication parameter	Receive PDO communication parameter	RW
0x1403	RPDO4 communication parameter	Receive PDO communication parameter	RW
0x1600	RPDO1 mapping parameter	Receive PDO mapping parameter	RW
0x1601	RPDO2 mapping parameter	Receive PDO mapping parameter	RW
0x1602	RPDO3 mapping parameter	Receive PDO mapping parameter	RW
0x1603	RPDO4 mapping parameter	Receive PDO mapping parameter	RW
0x1800	TPDO1 communication parameter	Transmit PDO communication parameter	RW
0x1801	TPDO2 communication parameter	Transmit PDO communication parameter	RW
0x1802	TPDO3 communication parameter	Transmit PDO communication parameter	RW
0x1803	TPDO4 communication parameter	Transmit PDO communication parameter	RW
0x1A00	TPDO1 mapping parameter	Transmit PDO mapping parameter	RW
0x1A01	TPDO2 mapping parameter	Transmit PDO mapping parameter	RW
0x1A02	TPDO3 mapping parameter	Transmit PDO mapping parameter	RW
0x1A03	TPDO4 mapping parameter	Transmit PDO mapping parameter	RW
0x2000	Control values	Control values of 16 bits or longer	RW
0x2001	Measurement values	Data readouts of 16 bits or longer	R
0x2010	Short Control values	Control values of less than 16 bits	RW
0x2011	Short Measurement values	Data registers of less than 16 bits	R
0x2100	Calibration data	Calibration	W
0x2200	Configuration data	Module configuration	RW
0x2210	Production data	Data to be written in production	R, (W)

4.2 OBJECT ENTRY DESCRIPTIONS OF COMMUNICATION PROFILE

The standard objects are described more in detail in CiA 301 ver 4.2.0 the Objects described here are the set of mandatory/optional objects that the device uses.

4.2.1 DEVICE TYPE

Index	0x1000
Object code	VAR

Sub-index	0x00
Access	R
PDO mapping	No
Value range	UNSIGNED32
Default Value	0x0

4.2.2 ERROR REGISTER

Index	0x1001
Object code	VAR

Sub-index	0x00
Access	R
PDO mapping	No
Value range	UNSIGNED8
Default Value	0x0

4.2.3 PRE-DEFINED ERROR FIELD

Index	0x1003
Object code	ARRAY

Sub-index	0x00
Description	Number of errors
Access	R
PDO mapping	No
Value range	UNSIGNED8
Default Value	0x0

Sub-index	0x01-0x05
Description	Standard Error field(s)
Access	R
PDO mapping	No
Value range	UNSIGNED32
Default Value	0x0

4.2.4 COB-ID SYNC

Index	0x1005
Object code	VAR

Sub-index	0x00
Description	COB-ID SYNC
Access	R
PDO mapping	No
Value range	UNSIGNED32
Default Value	0x0000 0080

4.2.5 MANUFACTURER DEVICE NAME

Index	0x1008
Object code	VAR

Sub-index	0x00
Description	Device name
Access	R
PDO mapping	No
Value range	VISIBLE_STRING
Default Value	"10384.1"

4.2.6 MANUFACTURER SOFTWARE VERSION

Index	0x100A
Object code	VAR

Sub-index	0x00
Description	Software Version
Access	R
PDO mapping	No
Value range	VISIBLE_STRING
Default Value	N/A

4.2.7 STORE PARAMETERS

Index	0x1010
Object code	ARRAY

Sub-index	0x00
Description	Highest subindex supported
Access	R
PDO mapping	No
Value range	UNSIGNED8
Default Value	6

Sub-index	0x01
Description	Save all parameters
Access	RW
PDO mapping	No
Value range	UNSIGNED32
Default Value	0

Sub-index	0x02
Description	Save communication parameters
Access	RW
PDO mapping	No
Value range	UNSIGNED32
Default Value	0

Sub-index	0x04
Description	Save calibration parameters
Access	RW
PDO mapping	No
Value range	UNSIGNED32
Default Value	0

Sub-index	0x05
Description	Save configuration parameters
Access	RW
PDO mapping	No
Value range	UNSIGNED32
Default Value	0

4.2.8 RESTORE PARAMETERS

Index	0x1011
Object code	ARRAY

Sub-index	0x00
Description	Highest subindex supported
Access	R
PDO mapping	No
Value range	UNSIGNED8
Default Value	5

Sub-index	0x01
Description	Restore all parameters
Access	RW
PDO mapping	No
Value range	UNSIGNED32

Default Value	0
---------------	---

Sub-index	0x02
Description	Restore communication parameters
Access	RW
PDO mapping	No
Value range	UNSIGNED32
Default Value	0

Sub-index	0x04
Description	Restore calibration parameters
Access	RW
PDO mapping	No
Value range	UNSIGNED32
Default Value	0

Sub-index	0x05
Description	Restore configuration parameters
Access	RW
PDO mapping	No
Value range	UNSIGNED32
Default Value	0

4.2.9 COB-ID EMCY

Index	0x1014
Object code	VAR

Sub-index	0x00
Description	COB-ID EMCY
Access	R
PDO mapping	No
Value range	UNSIGNED32
Default Value	0x80+Node ID

4.2.10 INHIBIT TIME EMCY

Index	0x1015
Object code	VAR

Sub-index	0x00
Description	Inhibit time EMCY
Access	RW
PDO mapping	No
Value range	UNSIGNED16 ¹

Default Value	0
---------------	---

¹Internal time keeping will only handle resolutions of 1 ms, setting time lower than that will effectively result in a time rounded up to 1 ms resolution

4.2.11 PRODUCER HEARTBEAT TIME

Index	0x1017
Object code	VAR

Sub-index	0x00
Description	Producer Heartbeat time
Access	RW
PDO mapping	No
Value range	UNSIGNED16 ¹ (0xA-0xFFFF)
Default Value	1000

4.2.12 IDENTITY OBJECT

Index	0x1018
Object code	RECORD

Sub-index	0x00
Description	Highest subindex supported
Access	R
PDO mapping	No
Value range	UNSIGNED8
Default Value	4

Sub-index	0x01
Description	Vendor ID
Access	R
PDO mapping	No
Value range	UNSIGNED32
Default Value	TBD

Sub-index	0x02
Description	Product Code
Access	R
PDO mapping	No
Value range	UNSIGNED32
Default Value	0x289001

Sub-index	0x03
Description	Revision Number
Access	R
PDO mapping	No
Value range	UNSIGNED323
Default Value	

Sub-index	0x04
Description	Serial Number
Access	R
PDO mapping	No
Value range	UNSIGNED32
Default Value	

4.2.13 RPDO_n COMMUNICATION PARAMETERS

Index	0x1400-0x1403
Object code	RECORD

Sub-index	0x00
Description	Highest subindex supported
Access	R
PDO mapping	No
Value range	UNSIGNED8
Default Value	2

Sub-index	0x01
Description	RPDO _n COBID
Access	RW ¹
PDO mapping	No
Value range	UNSIGNED32
Default Value	See separate table

¹Only the Valid bit is changeable via CAN

RPDO Number	Default value
1	0x8000 0200 + NodeID
2	0x8000 0300 + NodeID
3	0x8000 0400 + NodeID
4	0x8000 0500 + NodeID

Sub-index	0x02
Description	Transmission type
Access	RW
PDO mapping	No
Value range	UNSIGNED8
Default Value	1

4.2.14 RPDO_n MAPPING PARAMETERS

Index	0x1600-0x1603
Object code	RECORD

Sub-index	0x00
Description	Highest subindex supported
Access	R
PDO mapping	No
Value range	UNSIGNED8
Default Value	8

Sub-index	0x01-0x08
Description	N th application object
Access	RW
PDO mapping	No

Value range	UNSIGNED32
Default Value	See separate table

Application object	Default value
RPDO1 object 1-8	0x0000 0000
RPDO2 object 1-8	0x0000 0000
RPDO3 object 1-8	0x0000 0000
RPDO4 object 1-8	0x0000 0000

4.2.15 TPDOn COMMUNICATION PARAMETERS

Index	0x1800-0x1803
Object code	RECORD

Sub-index	0x00
Description	Highest subindex supported
Access	R
PDO mapping	No
Value range	UNSIGNED8
Default Value	5

Sub-index	0x01
Description	TPDOn COBID
Access	RW ¹
PDO mapping	No
Value range	UNSIGNED32
Default Value	See separate table

¹Only the Valid bit is changeable via CAN

TPDO Number	Default value
1	0x8000 0180 + NodeID
2	0x8000 0280 + NodeID
3	0x8000 0380 + NodeID
4	0x8000 0480 + NodeID

Sub-index	0x02
Description	Transmission type
Access	RW
PDO mapping	No
Value range	UNSIGNED8
Default Value	1

Sub-index	0x03
Description	Inhibit Time
Access	RW
PDO mapping	No

Value range	UNSIGNED16 ¹
Default Value	0

¹Internal time keeping will only handle resolutions of 1 ms, setting time lower than that will effectively result in a time rounded up to 1 ms resolution

Sub-index	0x05
Description	Event timer
Access	RW
PDO mapping	No
Value range	UNSIGNED32
Default Value	0

4.2.16 TPDOn MAPPING PARAMETERS

Index	0x1A00-0x1A03
Object code	RECORD

Sub-index	0x00
Description	Highest subindex supported
Access	R
PDO mapping	No
Value range	UNSIGNED8
Default Value	8

Sub-index	0x01-0x08
Description	N th application object
Access	RW
PDO mapping	No
Value range	UNSIGNED32
Default Value	See separate table

Application object	Default value
TPDO1 object 1-8	0x0000 0000
TPDO2 object 1-8	0x0000 0000
TPDO3 object 1-8	0x0000 0000
TPDO4 object 1-8	0x0000 0000

4.3 OBJECT ENTRY DESCRIPTIONS OF MANUFACTURER SPECIFIC OBJECTS

4.3.1 CONTROL VALUES

Control values objects contains control values of 16 bits length or longer

Index	0x2000
Object code	RECORD

Sub-index	0x00
Description	Highest subindex supported
Access	R
PDO mapping	No
Value range	UNSIGNED8
Default Value	0x03

Sub-index	0x01
Description	Voltage Setpoint (in cV)
Access	RW
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	Set by config

Sub-index	0x02
Description	Current Setpoint (in cA)
Access	RW
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	Set by config

Sub-index	0x03
Description	FAN speed
Access	RW
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	50

4.3.2 MEASUREMENT VALUES

The Measurement values contains measurement data longer than a single bit

Index	0x2001
Object code	RECORD

Sub-index	0x00
Description	Highest subindex supported
Access	R
PDO mapping	No
Value range	UNSIGNED8

Default Value	0x7
---------------	-----

Sub-index	0x01
Description	Voltage Measurement in cV
Access	R
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	N/A

Sub-index	0x02
Description	Current Measurement in cA
Access	R
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	N/A

Sub-index	0x03
Description	Temperature internal in °C
Access	R
PDO mapping	Yes
Value range	INTEGER16
Default Value	N/A

Sub-index	0x04
Description	Temperature external in °C
Access	R
PDO mapping	Yes
Value range	INTEGER16
Default Value	N/A

Sub-index	0x05
Description	Read output power in W
Access	R
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	N/A

Sub-index	0x06
Description	Read FAN speed
Access	R
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	N/A

Sub-index	0x07
Description	Read Alarm signals A 1 in the corresponding bit indicates the alarm is active Bit 0: Output voltage below low limit Bit 1: Output voltage above high limit Bit 2: Output current below low limit Bit 3: Output current above high limit Bit 4: Internal Temperature below low limit Bit 5: Internal Temperature above high limit Bit 6: External Temperature below low limit Bit 7: External Temperature above high limit Bit 8: FAN blocked Bit 9: PG alarm Bit 10: Spare DI alarm Bit 11: Major Fault Bit 12-31: Reserved for future use
Access	R
PDO mapping	Yes
Value range	UNSIGNED32
Default Value	0x00

4.3.3 SHORT CONTROL VALUES

The short control values objects contain control values that are either 0 (inactive) or 1 (active) unless otherwise specified

Index	0x2010
Object code	RECORD

Sub-index	0x00
Description	Highest subindex supported
Access	R
PDO mapping	No
Value range	UNSIGNED8
Default Value	0x5

Sub-index	0x01
Description	Relay control
Access	RW
PDO mapping	Yes
Value range	UNSIGNED8
Default Value	0x00

Sub-index	0x02
Description	Remote ON
Access	RW
PDO mapping	Yes
Value range	UNSIGNED8
Default Value	1

Sub-index	0x03
Description	LED ON
Access	RW
PDO mapping	Yes
Value range	UNSIGNED8
Default Value	0x02 ¹

¹For LED ON a 2 written to this register signals that the LED should act according to PDI spec while 1 or 0 overrides this and instead sets the LED constant on (1) or off (0)

Sub-index	0x04
Description	Spare Digital output
Access	RW
PDO mapping	Yes
Value range	UNSIGNED8
Default Value	0x00

Sub-index	0x05
Description	Major Fault relay override high
Access	RW
PDO mapping	Yes
Value range	UNSIGNED8
Default Value	0x00 ²

²Major fault relay control can only be set to 1 via communication. A 0 written to this will not necessarily set the fault relay output low depending on if other causes for a major fault are present.

4.3.4 SHORT MEASUREMENT VALUES

The short measurement values object contains measurements of data shorter than 16 bits. Unless otherwise stated the values here are 1 if active and 0 if inactive.

Index	0x2011
Object code	RECORD

Sub-index	0x00
Description	Highest subindex supported
Access	R
PDO mapping	No
Value range	UNSIGNED8
Default Value	0x03

Sub-index	0x01
Description	Power Good digital input
Access	R
PDO mapping	Yes
Value range	UNSIGNED8
Default Value	N/A

Sub-index	0x02
Description	Spare digital input
Access	R
PDO mapping	Yes
Value range	UNSIGNED8
Default Value	N/A

Sub-index	0x03
Description	Major fault digital input
Access	R
PDO mapping	Yes
Value range	UNSIGNED8
Default Value	N/A

4.3.5 CALIBRATION DATA

The Calibration Data object provides a way to calibrate the measurements of the PDI

Index	0x2010
Object code	RECORD

Sub-index	0x00
Description	Highest subindex supported
Access	R
PDO mapping	No
Value range	UNSIGNED8
Default Value	0xB

Sub-index	0x01
Description	Calibrate voltage low point. Send measured output voltage in cV at around 0-10 V on output
Access	W
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	0x00

Sub-index	0x02
Description	Calibrate voltage low, high point. Send measured output voltage in cV at around 18-20 V on output
Access	W
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	0x00

Sub-index	0x03
Description	Calibrate voltage high, high point. Send measured output voltage in cV at around 60-75 V on output
Access	W
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	0x00

Sub-index	0x04
Description	Calibrate current low point. Send measured output current in cA at around 0-1 A on output
Access	W
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	0x00

Sub-index	0x05
Description	Calibrate current low point. Send measured output current in cA at around 20-45 mV across the shunt resistor
Access	W
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	0x00

Sub-index	0x06
Description	Calibrate CB low point. Send measured output current in cA at around 0-1 A on output
Access	W
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	0x00

Sub-index	0x07
Description	Calibrate CB high point. Send measured output current in cA at around 60-100% load on output
Access	W
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	0x00

Sub-index	0x08
Description	Calibrate voltage setpoint low Set Voltage Setpoint to one of the lowest values allowed by the connected module then send the measured output voltage to this object in cV
Access	W
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	0x00

Sub-index	0x09
Description	Calibrate voltage setpoint high Set Voltage Setpoint to one of the highest values allowed by the connected module then send the measured output voltage to this object in cV
Access	W
PDO mapping	Yes

Value range	UNSIGNED16
Default Value	0x00

Sub-index	0x0A
Description	Calibrate Current setpoint low Set Current Setpoint to one of the lowest values allowed by the connected module then send the measured output voltage to this object in cA
Access	W
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	0x00

Sub-index	0x0B
Description	Calibrate Current setpoint high Set Current Setpoint to one of the highest values allowed by the connected module then send the measured output voltage to this object in cA
Access	W
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	0x00

4.3.6 CONFIGURATION DATA

The Configuration Data object provides a way to configure the PDI, if write protect is set in the configuration bit, all writes that does not only change the write protect bit will result in an abort

Index	0x2200
Object code	RECORD

Sub-index	0x00
Description	Highest subindex supported
Access	R
PDO mapping	No
Value range	UNSIGNED8
Default Value	0xF

Sub-index	0x01
Description	Configuration bits bit 0: remote on/off polarity when set to one the PDI will assume module on when output is low. bit 1: Enable Voltage output control bit 2: Enable current control bit 3: Enable voltage and current control (both at the same time) bit 4: Enable module modbus communication (not used) bit 5: Enable PG voltage alarm bit 6: Enable Output voltage alarm bit 7: Enable warning signal bit 8: Enable module UART com (not used) bit 9: Enable module PM bus com (not used) bit 10: Use com for set values (not used) bit 11: use com for current/voltage measurements (not used) bit 12: use CB for current measurements instead of shunt bit 13: write protect config, this bit must be set to 0 before changing any other configuration. bit 14-31 Reserved for future use
Access	RW
PDO mapping	Yes
Value range	UNSIGNED32
Default Value	0x00

Sub-index	0x02
-----------	------

Description	Max voltage on reference. Sets the maximum allowed voltage on the Vref and Iref outputs in cV
Access	RW
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	250

Sub-index	0x03
Description	Baudrate configuration, for CAN this, is settable to the Baudrate in 100 Bit/s increments. allowed values are as listed in Error! Reference source not found.. all other values will default to 125 kBit/s ¹
Access	RW
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	0x00

Sub-index	0x04
Description	Communication ID. This sets the CANOpen NodeID of the module ¹
Access	RW
PDO mapping	Yes
Value range	UNSIGNED8
Default Value	0x01

¹Changes to Baudrate and NodeID will only take effect on next reset (and thus a save parameters needs to be sent as well)

Sub-index	0x05
Description	~~Module Communication ID. Not initially used~~
Access	RW
PDO mapping	Yes
Value range	UNSIGNED8
Default Value	0x00

Sub-index	0x06
Description	Voltage warning low level. If measured output voltage is lower than this value in cV an alarm bit will be set
Access	RW
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	0x0000

Sub-index	0x07
-----------	------

Description	Voltage warning high level. If measured output voltage is higher than this value in cV an alarm bit will be set
Access	RW
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	0xFFFF

Sub-index	0x08
Description	Current warning low level. If measured output current is lower than this value in cA an alarm bit will be set
Access	RW
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	0x0000

Sub-index	0x09
Description	Current warning high level. If measured output current is higher than this value in cA an alarm bit will be set
Access	RW
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	0xFFFF

Sub-index	0x0A
Description	Internal Temperature warning low level. If measured output current is lower than this value an alarm bit will be set
Access	RW
PDO mapping	Yes
Value range	INTEGER16
Default Value	-35

Sub-index	0x0B
Description	Internal Temperature warning high level. If measured output current is higher than this value an alarm bit will be set
Access	RW
PDO mapping	Yes
Value range	INTEGER16
Default Value	60

Sub-index	0x0C
Description	External Temperature warning low level. If measured output current is lower than this value an alarm bit will be set
Access	RW
PDO mapping	Yes
Value range	INTEGER16
Default Value	-35

Sub-index	0x0D
Description	External Temperature warning high level. If measured output current is higher than this value an alarm bit will be set
Access	RW
PDO mapping	Yes
Value range	INTEGER16
Default Value	60

Sub-index	0x0E
Description	Default Voltage Reference in cV
Access	RW
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	1200

Sub-index	0x0F
Description	Default Current Reference in cA
Access	RW
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	0

4.3.7 PRODUCTION DATA

The Production Data object provides a way to write and read production data from the PDI. Production data can only be written until its first storage into flash, after that it is read only

Index	0x2210
Object code	RECORD

Sub-index	0x00
Description	Highest subindex supported
Access	R
PDO mapping	No
Value range	UNSIGNED8
Default Value	0x6

Sub-index	0x01
Description	PDI serial number
Access	R(W)
PDO mapping	Yes
Value range	UNSIGNED32
Default Value	N/A

Sub-index	0x02
Description	PDI Revision Number
Access	R(W)
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	N/A

Sub-index	0x03
Description	Hardware Part Number
Access	R(W)
PDO mapping	Yes
Value range	UNSIGNED32
Default Value	N/A

Sub-index	0x04
Description	Software Revision number
Access	R
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	N/A

Sub-index	0x05
Description	Boot SW revision number
Access	R
PDO mapping	Yes
Value range	UNSIGNED16
Default Value	N/A

Sub-index	0x06
Description	Boot SW Part number
Access	R
PDO mapping	Yes
Value range	UNSIGNED32
Default Value	N/A

5 **Manufacturer specific errors**

The manufacturer specific error codes described in CAN CiA 301 are implemented as follows

Bit No	Error
0	Low output voltage
1	High output voltage
2	Low output current
3	Hight output current
4	Internal temperature low
5	Internal temperature High
6	External temperature low
7	External temperature High
8	FAN rpm < 100
9	Power good input not ok (if configured)
10	Spare input not ok (if configured)
11	Major Fault (Fault input or Fault override set)