

PDU 1

Device address (Node ID): 10										Parameter							Notes			
Type	Direct ion	Priori ty	R	DP	PF	PS	SA	PGN	29Bit ID (dez)	29Bit ID (hex)	DLC	Byte 0	Byte 1	Byte 2	Byte 3	Byte 4		Byte 5	Byte 6	Byte 7
PDU1	Receive		7	0	0	239	10	0	61194	485427712	1CEF0A00	8	1							Start and stop measurement (if in Measurement Mode 2) 1 = Start of a measurement 2 = Stop of a measurement 3 = intermediate result
PDU1	Receive		7	0	0	239	10	0	61194	485427712	1CEF0A00	8	2							Measurement mode 0 = Time Control 1 = Digital I/O-Pin 2 = Button/RS232/CANopen/J1939 Control 3 = Automatic
PDU1	Receive		7	0	0	239	10	0	61194	485427712	1CEF0A00	8	3							History disable 0 = History enabled 1 = History disabled
PDU1	Receive		7	0	0	239	10	0	61194	485427712	1CEF0A00	8	4			Measurement time in seconds (Range: 0x1E..0x12C, corresponds to 30-300 seconds)				Delay time between two measurements in seconds (Range: 0x1..0x1517F, corresponds to 1-86399 seconds)
PDU1	Receive		7	0	0	239	10	0	61194	485427712	1CEF0A00	8	5			Amount of measurements used for arithmetic mean of Alarm concentrationen				Display & Alarm Standard Alarm Type: 0 = Standard 1 = SAE 2 = NAS 3 = GOST
PDU1	Receive		7	0	0	239	10	0	61194	485427712	1CEF0A00	8	6			ordinal numeral (ISO/SAE) for alarm at 4 µm				ordinal numeral (ISO/SAE) for alarm at 6 µm ordinal numeral (ISO/SAE) for alarm at 14 µm ordinal numeral (ISO/SAE) for alarm at 21 µm
PDU1	Receive		7	0	0	239	10	0	61194	485427712	1CEF0A00	8	7							ordinal numeral NAS for alarm
PDU1	Receive		7	0	0	239	10	0	61194	485427712	1CEF0A00	8	8							ordinal numeral GOST for alarm
PDU1	Receive		7	0	0	239	10	0	61194	485427712	1CEF0A00	8	9							Alarm threshold temperature, range: 0..85 °C 0 = deactivated
PDU1	Receive		7	0	0	239	10	0	61194	485427712	1CEF0A00	8	10							enable communication interface: 0: RS232 1: CANopen 2: auto 3: J1939
PDU1	Receive		7	0	0	239	10	0	61194	485427712	1CEF0A00	8	11							CAN-Baudrate: 3: 125k 4: 250k 5: 500k 6: 1000k
PDU1	Receive		7	0	0	239	10	0	61194	485427712	1CEF0A00	8	12							RS232-Baudrate: 0: 9600 1: 19200 2: 57600 3: 115200
PDU1	Receive		7	0	0	239	10	0	61194	485427712	1CEF0A00	8	13							CAN Node-ID
PDU1	Receive		7	0	0	239	10	0	61194	485427712	1CEF0A00	8	14							CAN Terminator 0 = off 1 = on
PDU1	Receive		7	0	0	239	10	0	61194	485427712	1CEF0A00	8	15							Flow in deciliter/minute: if 0 is set, then device calculates the flow automaticl, range between .50 and 500 flow is fixed
PDU1	Receive		7	0	0	239	10	0	61194	485427712	1CEF0A00	8	16							Amount of particles to be detected in automatic mode
PDU1	Receive		7	0	0	239	10	0	61194	485427712	1CEF0A00	8	17							Mask for PGNs of PDU2 format to be send, if bit (value of which corresponds wit PS of PDU2) is TRUE, then the PGN will be send. transmission interval of all PGNs of PDU2 format in seconds 0 = as soon as new value is available > 0 = Intervall in seconds (Default = 10)
PDU1	Receive		7	0	0	239	10	0	61194	485427712	1CEF0A00	8	250							0x55 = Reboot the device

If auto is activated and CAN is detected, preferred protokol type is defined via RS232 command: SCAutoDef
0 = CANopen
1 = J1939

PDU 2

Device address (Node ID): 10										Byte 0	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7	Intervall							
PDU2	Transmit	7	0	0	255	0	10	65280	486473738	1CFF000A	Internal time stamp of the measurement			ISO 4µm	ISO 6µm	ISO 14µm	ISO 21µm	default: 10 seconds							
PDU2	Transmit	7	0	0	255	1	10	65281	486473994	1CFF010A	Internal time stamp of the measurement			SAE 4µm	SAE 6µm	SAE 14µm	SAE 21µm	default: 10 seconds							
														SAE-Standard coding: Offset of two in order to represent 000, 00 and 0, valid for all classes 0 = SAE 000 1 = SAE 00 2 = SAE 0 3 = SAE 1 4 = SAE 2											
PDU2	Transmit	7	0	0	255	2	10	65282	486474250	1CFF020A	Internal time stamp of the measurement					GOST 17216	NAS	default: 10 seconds							
PDU2	Transmit	7	0	0	255	3	10	65283	486474506	1CFF030A	Current internal time (operating hours, in seconds)			Öl-Zustandsbits	Messbits	Sensorstatusbits	Temperatur	default: 10 seconds							
														Bit 0: concentration threshold exceeded (>= ISO 23) Bit 1: high flow (>500ml/min) Bit 2: low flow (<50ml/min) Bit 3: measurements not plausible (e.g. air, ISO(i+1)>=ISO(i))				Bit 0: measurement in progress Bit 1: measurement type auto (time controlled) Bit 2: measurement type I/O (digital input) Bit 3: measurement type manual (Button/RS232/CANopen/J1939) Bit 4: Alarm mode: Filter / Standard Bit 5: Power-Up Bit 6: Alarm concentration (corresponds with alarm-LED) Bit 7: temperature alarm triggered				Bit 0: Laser current high (I >2,8mA) Bit 1: Laser current low (I <1mA) Bit 2: Photodiode voltage high (U>4V) Bit 3: Photodiode voltage low (U<4V) Bit 4: Temperature high (T>80 °C) Bit 5: Temperature low (T<20 °C) Bit6: - Bit7: Measurement mode Auto			
PDU2	Transmit	7	0	0	255	4	10	65284	486474762	1CFF040A	Serial number			Bits 31..20: Current measurement time in seconds (Range: 0x0..0xFFFF, maximum value 3599 seconds), if operation mode 2 is enabled, the current time since start of the measurement is transmitted here. Bits 19..0: delay time between two measurements in seconds (range: 0x0..0xFFFFF, maximum value 86399 seconds)			Findex/2000	default: 10 seconds							
PDU2	Transmit	7	0	0	255	5	10	65285	486475018	1CFF050A	Laser operating time			Hours until calibration message S1				default: 10 seconds							
PDU2	Transmit	7	0	0	255	6	10	65286	486475274	1CFF060A	Internal time stamp of the measurement			Particles 4µm =(LOG2(concentration)+1)* 10	Particles 6µm =(LOG2(concentration)+1)* 10	Particles 14µm =(LOG2(concentration)+1)* 10	Particles 21µm =(LOG2(concentration)+1)* 10	default: 10 seconds							

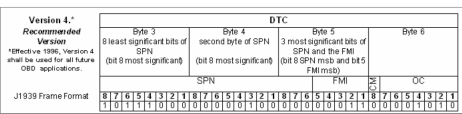
SPN

PGN	Parameter Group Label	PGN Length	Transmission Rate	Acronym	pos	SPN length (Bit)	SPN	Name	Description	Data Range	Operational Range	Resolution	Offset	Units	Date SPN was added to PGN	Status of SPN addition	Date SPN was deleted/modified	Status of SPN	SPN Doc	PGN Doc
65280	OPCom II Data	8	default: 10 seconds			32	520192	Internal time stamp of the measurement	Internal time stamp of the measurement	0 to 4294967295	0 to 255	1 Bit, 1 second	0	seconds	05-Mai-14		05.05.2014			
65280	OPCom II Data	8	default: 10 seconds			8	520193	ISO 4µm	Ordinal numeral ISO-class 4µm	0 to 255	0 to 23	1 Bit, 1 Ordinal numeral	0	Ordinal numeral	05-Mai-14		05.05.2014			
65280	OPCom II Data	8	default: 10 seconds			8	520194	ISO 6µm	Ordinal numeral ISO-class 6µm	0 to 255	0 to 23	1 Bit, 1 Ordinal numeral	0	Ordinal numeral	05-Mai-14		05.05.2014			
65280	OPCom II Data	8	default: 10 seconds			8	520195	ISO 14µm	Ordinal numeral ISO-class 14µm	0 to 255	0 to 23	1 Bit, 1 Ordinal numeral	0	Ordinal numeral	05-Mai-14		05.05.2014			
65280	OPCom II Data	8	default: 10 seconds			8	520196	ISO 21µm	Ordinal numeral ISO-class 21µm	0 to 255	0 to 23	1 Bit, 1 Ordinal numeral	0	Ordinal numeral	05-Mai-14		05.05.2014			
65281	OPCom II Data	8	default: 10 seconds			8	520197	SAE 4µm	Ordinal numeral SAE-class 4µm 0 = SAE 000 1 = SAE 00 2 = SAE 0 3 = SAE 1 4 = SAE 2	0 to 255	0 to 23	1 Bit, 1 Ordinal numeral	0	Ordinal numeral	05-Mai-14		05.05.2014			
65281	OPCom II Data	8	default: 10 seconds			8	520198	SAE 6µm	Ordinal numeral SAE-class 6µm 0 = SAE 000 1 = SAE 00 2 = SAE 0 3 = SAE 1 4 = SAE 2	0 to 255	0 to 23	1 Bit, 1 Ordinal numeral	0	Ordinal numeral	05-Mai-14		05.05.2014			
65281	OPCom II Data	8	default: 10 seconds			8	520199	SAE 14µm	Ordinal numeral SAE-class 14µm 0 = SAE 000 1 = SAE 00 2 = SAE 0 3 = SAE 1 4 = SAE 2	0 to 255	0 to 23	1 Bit, 1 Ordinal numeral	0	Ordinal numeral	05-Mai-14		05.05.2014			
65281	OPCom II Data	8	default: 10 seconds			8	520200	SAE 21µm	Ordinal numeral SAE-class 21µm 0 = SAE 000 1 = SAE 00 2 = SAE 0 3 = SAE 1 4 = SAE 2	0 to 255	0 to 23	1 Bit, 1 Ordinal numeral	0	Ordinal numeral	05-Mai-14		05.05.2014			
65282	OPCom II Data	8	default: 10 seconds			8	520201	NAS	Continuation represented as NAS standard: Offset of one in order to represent 00 and 0, valid for all classes 0 == NAS 00 1 == NAS 0 2 == NAS 1 3 == NAS 2 4 == NAS 3 ... 13 == NAS 12 (maximum value)	0 to 255	0 to 13	1 Bit, 1 Ordinal numeral	0	Ordinal numeral	28-Aug-14		28.08.2014			
65282	OPCom II Data	8	default: 10 seconds			8	520202	GOST 17216	Continuation represented as GOST standard: Offset of one in order to represent 00 and 0, valid for all classes 0 == GOST 0 1 == GOST 1 2 == GOST 2 3 == GOST 3 ... 17 == GOST 16 (maximum value)	0 to 255	0 to 17	1 Bit, 1 Ordinal numeral	0	Ordinal numeral	28-Aug-14		28.08.2014			
65283	OPCom II Data	8	default: 10 seconds			32	520203	Current internal time (operating hours, in seconds)	Current internal operating time	0 to 4294967295	0 to 255	1 Bit, 1 second	0	seconds	05-Mai-14		05.05.2014			
65283	OPCom II Data	8	default: 10 seconds			8	520204	Öl-Zustandsbits	Bit 0: concentration threshold exceeded (>= ISO 23) Bit 1: high flow (>500l/min) Bit 2: low flow (<50l/min) Bit 3: measurements not plausible (e.g. air: ISO(1-1)=ISO(0)) Bit 4: measurement in progress Bit 5: measurement type auto (time controlled) Bit 6: measurement type IO (digital input) Bit 7: measurement type manual (Button RS232/CANopen/J1939) Bit 8: Alarm mode: Filter / Standard Bit 9: Power-Up Bit 10: Alarm concentration (corresponds with alarm-LED) Bit 11: temperature alarm triggered Bit 12: Laser current high (I>2.8mA) Bit 13: Laser current low (I<1mA) Bit 14: Photodiode voltage high (U>4V) Bit 15: Photodiode voltage low (U<4V) Bit 16: Temperature high (T>80°C) Bit 17: Temperature low (T<20°C) Bits: - Bit 18: Measurement mode Auto	0 to 255	0 to 15	1 Bit	0	05-Mai-14		05.05.2014				
65283	OPCom II Data	8	default: 10 seconds			8	520205	Messbits	Bit 0: measurement in progress Bit 1: measurement type auto (time controlled) Bit 2: measurement type IO (digital input) Bit 3: measurement type manual (Button RS232/CANopen/J1939) Bit 4: Alarm mode: Filter / Standard Bit 5: Power-Up Bit 6: Alarm concentration (corresponds with alarm-LED) Bit 7: temperature alarm triggered Bit 8: Laser current high (I>2.8mA) Bit 9: Laser current low (I<1mA) Bit 10: Photodiode voltage high (U>4V) Bit 11: Photodiode voltage low (U<4V) Bit 12: Temperature high (T>80°C) Bit 13: Temperature low (T<20°C) Bits: - Bit 14: Measurement mode Auto	0 to 255	0 to 127	1 Bit	0	05-Mai-14		05.05.2014				
65283	OPCom II Data	8	default: 10 seconds			8	520206	Sensorstatusbits	Bit 0: Laser current high (I>2.8mA) Bit 1: Laser current low (I<1mA) Bit 2: Photodiode voltage high (U>4V) Bit 3: Photodiode voltage low (U<4V) Bit 4: Temperature high (T>80°C) Bit 5: Temperature low (T<20°C) Bits: - Bit 6: Measurement mode Auto	0 to 255	0 to 63	1 Bit	0	05-Mai-14		05.05.2014				
65283	OPCom II Data	8	default: 10 seconds			8	520207	Temperatur	Device temperature resolution 1bit/K Offset: 40°C (0 = 40°C, 40 = 0°C, 140 = 100°C)	0 to 255	0 to 250	1 Bit, 1 Kelvin	40	°C	05-Mai-14		05.05.2014			
65284	OPCom II Data	8	default: 10 seconds			24	520208	Serial number	Serial number	0 to 16777215	0 to 999999	1 Bit, 1 second	0	seconds	05-Mai-14		05.05.2014			
65284	OPCom II Data	8	default: 10 seconds			12	520209	Current measurement time in seconds	Current measurement time in seconds (range: 0x0.0xFFF, maximum value 3599 seconds)	0 to 4095	0 to 3599	1 Bit, 1 second	0	seconds	05-Mai-14		05.05.2014			
65284	OPCom II Data	8	default: 10 seconds			20	520210	Delay time between two measurements in seconds	Delay time between two measurements in seconds (Range: 0x1.0x1517F, corresponds to 1.86399 seconds)	0 to 104875	0 to 86399	1 Bit, 1 second	0	seconds	05-Mai-14		05.05.2014			
65284	OPCom II Data	8	default: 10 seconds			8	520211	Findex2000	Current Findex (set or calculated)	0 to 255	0 to 250	1 Bit	0	05-Mai-14		05.05.2014				
65285	OPCom II Data	8	default: 10 seconds			32	520212	Laser operating time	Laser operating time in seconds	0 to 4294967295	0 to 255	1 Bit, 1 hour	0	hours	28-Aug-14		28.08.2014			
65285	OPCom II Data	8	default: 10 seconds			32	520213	Hours until calibration message S1	Remaining hours until until the first calibration message S1 is displayed	0 to 4294967295	0 to 255	1 Bit, 1 hour	0	hours	28-Aug-14		28.08.2014			
65286	OPCom II Data	8	10 Sekunden			8	520214	Partikel 4µm	Particles in 4µm class in current measurement	0 to 255	0 to 250	1 Bit	0	05-Dez-14		05.12.2014				
65286	OPCom II Data	8	10 Sekunden			8	520215	Partikel 6µm	Particles in 6µm class in current measurement	0 to 255	0 to 250	1 Bit	0	05-Dez-14		05.12.2014				
65286	OPCom II Data	8	10 Sekunden			8	520216	Partikel 14µm	Particles in 14µm class in current measurement	0 to 255	0 to 250	1 Bit	0	05-Dez-14		05.12.2014				
65286	OPCom II Data	8	10 Sekunden			8	520217	Partikel 21µm	Particles in 21µm class in current measurement	0 to 255	0 to 250	1 Bit	0	05-Dez-14		05.12.2014				

J1939-73

Type	Dir	Prior	R	DP	PF	PS	SA	PGN	2988 ID (hex)	2988 ID (hex)	Byte 0	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7	Notes				
DM2	Transmit		6	0	0	254	202	10	65226	41951059	18FECA0A	Lamp bits 0-7: Malfunction Indicator Lamp Status bits 8-9: Red Stop Lamp bits 4-3: Amber Warning Lamp bits 2-1: Protect Lamp	Lamp (Flash) bits 0-7: Flash Malfunction Indicator Lamp Status bits 8-9: Flash Red Stop Lamp bits 4-3: Flash Amber Warning Lamp bits 2-1: Flash Protect Lamp	19 bits: SPN Suspect Parameter Group, where did the error occurred 5 bits: FMI Failure Mode Identifier, error type 1 bit: CM Conversion Method: minor 0 = Version 4 7 bit: OC Occurrence Count: 0-126, occurrences since last reboot									A DM1 message is transmitted whenever a DTC becomes an active fault and at a normal update rate of only once per second thereafter. If a fault has been active for 1 second or longer, and then becomes inactive, a DM1 message shall be transmitted to reflect this state change. If a different DTC changes state within the 1 second update period, a new DM1 message is transmitted to reflect this new DTC. To prevent a high message rate due to intermittent faults that have a very high frequency, it is recommended that no more than one state change per DTC per second be transmitted.

Given:
 SPN 1208 = 4B₁₆ = 000 00000100 10111000₂ (19 bits)
 FMI 3 = 3₁₆ = 00011₂ (5 bits)
 OC 10 = A₁₆ = 0001010₂ (7 bits)
 CM = 0₁₆ (1 bit)



DM1 will be send on PDU Request: ID=018EA_DA_SA, (DA=Destination Address, SA=Source Address)
 DLC = 3
 Byte0-3 = Requested PGN (here: 65227)

Type	Dir	Prior	R	DP	PF	PS	SA	PGN	2988 ID (hex)	2988 ID (hex)	DLC	Byte 0	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7	Notes	
DM2	Transmit		6	0	0	234	10	0	59914	41799188	18EAA0A0	3	0xCB	0xFE	0x00						Requests a DM2 message answer. The device sends back occurred alarms since last reboot.

DM2 will be send on PDU Request: ID=018EA_DA_SA, (DA=Destination Address, SA=Source Address)
 DLC = 3
 Byte0-3 = Requested PGN (here: 65227)

Type	Dir	Prior	R	DP	PF	PS	SA	PGN	2988 ID (hex)	2988 ID (hex)	Byte 0	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7	Notes		
DM2	Transmit		6	0	0	254	203	10	65227	41951336	18FEC0A0	8	Lamp	Lamp (Flash)	19 bits: SPN Suspect Parameter Group, where did the error occurred 5 bits: FMI Failure Mode Identifier, error type 1 bit: CM Conversion Method: minor 0 = Version 4 7 bit: OC Occurrence Count: 0-126, occurrences since last reboot						On request using PGN 59904. See SAE J1939-21 (see above). A MACK is required if PG not supported (see SAE J1939-21 PGN 59902).

EXAMPLE 1: The following illustrates the message format for when there is more than one diagnostic trouble code.
 Given:
 a=lamp status (LS)
 b=SPN
 c=FMI
 d=CM and OC
 Message form will be as follows: a.b.c.d.b.c.d.b.c.d...etc. In this example, the transport protocol of SAE J1939-21 will have to be used to send the information because it requires more than 8 data bytes. Actually any time there is more than one fault the services of the transport protocol will have to be used.

Example 1:
 In ISO6 class the threshold for the allowed contamination was exceeded, though it is still within the measurement range of < 23, first occurrence
 This leads to two DM2 message, one for ISO and one for SAE, Warm lamp on.
 ISO: SPN = 320294
 SAE: SPN = 320298
 FMI = 0 (Data Valid But Above Normal Operational Range - Most Severe Level)

Type	Dir	Prior	R	DP	PF	PS	SA	PGN	2988 ID (hex)	2988 ID (hex)	Byte 0	Byte 1	Byte 2 (bin)	Byte 3 (bin)	Byte 4 (bin)	Byte 5 (bin)	Byte 6	Byte 7	Notes	
DM2	Transmit		6	0	0	254	202	10	65226	41951059	18FECA0A	0x04	0xFF	00000010	11110000	11100000	00000001	0xFF	0xFF	SPN: 320294 FMI: 0 CM: 0 OC: 1

Type	Dir	Prior	R	DP	PF	PS	SA	PGN	2988 ID (hex)	2988 ID (hex)	Byte 0	Byte 1	Byte 2 (bin)	Byte 3 (bin)	Byte 4 (bin)	Byte 5 (bin)	Byte 6	Byte 7	Notes	
DM2	Transmit		6	0	0	254	202	10	65226	41951059	18FECA0A	0x04	0xFF	00000110	11110000	11100000	00000001	0xFF	0xFF	SPN: 320298 FMI: 0 CM: 0 OC: 1

Example 2:
 In ISO6 class the measurement range (> 23) has been exceeded, 30th occurrence
 This leads to two DM2 message, one for ISO and one for SAE, Warm lamp: blinking
 ISO: SPN = 320293
 SAE: SPN = 320297
 FMI = 3 (Voltage Above Normal, Or Shorted To High Source, A voltage signal, data or otherwise, is above the predefined limits that bound the range (Region) of the signal range definition). Broadcast of data value is substituted with the "error indicator" value)

Type	Dir	Prior	R	DP	PF	PS	SA	PGN	2988 ID (hex)	2988 ID (hex)	Byte 0	Byte 1	Byte 2 (bin)	Byte 3 (bin)	Byte 4 (bin)	Byte 5 (bin)	Byte 6	Byte 7	Notes	
DM2	Transmit		6	0	0	254	202	10	65226	41951059	18FECA0A	0x00	0xF3	00000001	11110000	11100000	0001010	0xFF	0xFF	SPN: 320193 FMI: 0 CM: 0 OC: 10

Type	Dir	Prior	R	DP	PF	PS	SA	PGN	2988 ID (hex)	2988 ID (hex)	Byte 0	Byte 1	Byte 2 (bin)	Byte 3 (bin)	Byte 4 (bin)	Byte 5 (bin)	Byte 6	Byte 7	Notes	
DM2	Transmit		6	0	0	254	202	10	65226	41951059	18FECA0A	0x00	0xF3	00001011	11110000	11100000	0001010	0xFF	0xFF	SPN: 320197 FMI: 0 CM: 0 OC: 10

Example 3:
 No error active

Type	Dir	Prior	R	DP	PF	PS	SA	PGN	2988 ID (hex)	2988 ID (hex)	Byte 0	Byte 1	Byte 2 (bin)	Byte 3 (bin)	Byte 4 (bin)	Byte 5 (bin)	Byte 6	Byte 7	Notes	
DM2	Transmit		6	0	0	254	202	10	65226	41951059	18FECA0A	0x00	0xFF	00000000	00000000	00000000	00000000	0xFF	0xFF	SPN: 0 FMI: 0 CM: 0 OC: 0

Example 4:
 Threshold for the allowed temperature was exceeded, though it is still within the measurement range, first occurrence
 Warm lamp on
 ISO: SPN = 320207
 FMI = 0 (Data Valid But Above Normal Operational Range - Most Severe Level)

Type	Dir	Prior	R	DP	PF	PS	SA	PGN	2988 ID (hex)	2988 ID (hex)	Byte 0	Byte 1	Byte 2 (bin)	Byte 3 (bin)	Byte 4 (bin)	Byte 5 (bin)	Byte 6	Byte 7	Notes	
DM2	Transmit		6	0	0	254	202	10	65226	41951059	18FECA0A	0x04	0xFF	00001111	11110000	11100000	00000001	0xFF	0xFF	SPN: 320207 FMI: 0 CM: 0 OC: 1

NAME Field

Name	Identity Number	Manufacturer Code/ID	ECU	Function Instance	Function	R	Vehicle System	Industry Group	Vehicle System Instance	Arbitrary Address capable
Bits	21	11	3	5	8	1	7	3	4	1
Maximum value	2097151	2047	7	31	255	1	127	7	15	1
Single value (dez)	20300	590	1	12	200	0	0	0	0	1
Wert (hex)	0000001001111010011000100100111000101100110010000000000000000001									
intermediate calculation	027A3127		2C		C8	00		01		
total value (hex)	027A31272CC80001									

ID-Decoding

ID (hex)	Priority	R	DP	PF	PS	SA	PGN (dez)	PGN (hex)	29Bit ID (dez)	29Bit ID (hex)	Description			
1cecff0a	1CECFF0A	7	0	0	236	255	10	60671	ECFF	485293834	1CECFF0A	Transport Protocol - Connection Management (TP.CM)	EBFF	Transport Protocol - Data Transfer (TP.DT)
1cebff0a	1CEBFF0A	7	0	0	235	255	10	60415	EBFF	485228298	1CEBFF0A	Transport Protocol - Data Transfer (TP.DT)	ECFF	Transport Protocol - Connection Management (TP.CM)

Transport Protocol - Data Trans

1CECF0A	8	29bit	20	1A	00	04	FF	CA	FE	00	0006	Rx
1CEBF0A	8	29bit	04	0F	0F	F0	E0	08	FF	FF	0005	Rx
1CEBF0A	8	29bit	03	03	F0	E0	0F	04	F0	E0	0004	Rx
1CEBF0A	8	29bit	02	F0	E0	0F	02	F0	E0	0F	0003	Rx
1CEBF0A	8	29bit	01	00	F3	0D	F0	E3	08	01	0002	Rx
1CECF0A	8	29bit	20	1A	00	04	FF	CA	FE	00	0001	Rx

Die kodierten Daten

BAM = Broadcast

Nachrichtenreihenfolge

Anzahl der Bytes

PGN der Daten

Anzahl der Nachrichten