

Interface Protocol

INE-M12/32V-B04G3-2R3 (214388), INE-M12/50V-B04G3-B3 (214389), INE-M12/52V-B04G3-2R3 (214390), INE-M12/70V-B04G3-B3 (214391), INE-M12/36V-N08G3-2R3 (214392), INE-M12/54V-N08G3-B3 (214393), INE-M12/56V-N08G3-2R3 (214394), INE-M12/74V-N08G3-B3 (214395), INE-M18/42V-N14G3-2R3 (214400), INE-M18/64V-N14G3-B3 (214401), INE-M18/62V-N14G3-2R3 (214402), INE-M18/84V-N14G3-B3 (214403), INE-M18/32V-B08G3-2R3 (214396), INE-M18/54V-B08G3-B3 (214397), INE-M18/52V-B08G3-2R3 (214398), INE-M18/74V-B08G3-B3 (214399), INE-M30/44V-N22G3-2R3 (214408), INE-M30/67V-N22G3-B3 (214409), INE-M30/64V-N22G3-2R3 (214410), INE-M30/87V-N22G3-B3 (214411), INE-M30/32V-B15G3-2R3 (214404), INE-M30/55V-B15G3-B3 (214405), INE-M30/52V-B15G3-2R3 (214406), INE-M30/75V-B15G3-B3 (214407)

Vendor: di-soric GmbH & Co. KG

IODD-File: di-soric-INE-20260616-IODD1.1.xml

IODD Release Date: 06/16/2026

Vendor ID

Vendor Name	Hex	Dec
di-soric GmbH & Co. KG	0x0221	545

Product ID

Product	Product ID	DeviceID hex	DeviceID dec
INE-M12/32V-B04G3-2R3	214388	0x000119	281
INE-M12/50V-B04G3-B3	214389	0x000119	281
INE-M12/52V-B04G3-2R3	214390	0x000119	281
INE-M12/70V-B04G3-B3	214391	0x000119	281
INE-M12/36V-N08G3-2R3	214392	0x000119	281
INE-M12/54V-N08G3-B3	214393	0x000119	281
INE-M12/56V-N08G3-2R3	214394	0x000119	281
INE-M12/74V-N08G3-B3	214395	0x000119	281
INE-M18/42V-N14G3-2R3	214400	0x000119	281
INE-M18/64V-N14G3-B3	214401	0x000119	281
INE-M18/62V-N14G3-2R3	214402	0x000119	281
INE-M18/84V-N14G3-B3	214403	0x000119	281
INE-M18/32V-B08G3-2R3	214396	0x000119	281
INE-M18/54V-B08G3-B3	214397	0x000119	281
INE-M18/52V-B08G3-2R3	214398	0x000119	281
INE-M18/74V-B08G3-B3	214399	0x000119	281
INE-M30/44V-N22G3-2R3	214408	0x000119	281
INE-M30/67V-N22G3-B3	214409	0x000119	281
INE-M30/64V-N22G3-2R3	214410	0x000119	281
INE-M30/87V-N22G3-B3	214411	0x000119	281
INE-M30/32V-B15G3-2R3	214404	0x000119	281
INE-M30/55V-B15G3-B3	214405	0x000119	281
INE-M30/52V-B15G3-2R3	214406	0x000119	281
INE-M30/75V-B15G3-B3	214407	0x000119	281

Identification

Parameter Description	Index dec	Index hex	R/W	Value	Datatype
Vendor name	16	0x0010	RO	di-soric GmbH & Co. KG	StringT
Vendor text	17	0x0011	RO	SOLUTIONS. CLEVER. PRACTICAL.	StringT
Product name	18	0x0012	RO	INE-M12/32V-B04G3-2R3	StringT
Product ID	19	0x0013	RO	214388	StringT
Product text	20	0x0014	RO		StringT
Firmware version	23	0x0017	RO		StringT

Application specific tag	24	0x0018	RW		StringT
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Features

Feature	Value
IO-Link Revision	1.1
Data Storage ("DS")	Yes
Block Parameter	Yes
Min. Cycle Time	10,4 ms
Transmission Rate	38,4 kbit/s (COM2)
Process Data Input (Device to Master)	1 Byte
Process Data Output (Master to Device)	N/A

Profile IDs

Device Profile				
ProfileID hex	ProfileID dec	Name short	Name long	Type Reference
0x0004	4	AdSS	Adjustable Switching Sensor, single value teach	SSP 2.1 Smart Sensor
Common Application Profile				
ProfileID hex	ProfileID dec	Name short	Name long	Type Reference
0x4000	16384	I&D	Identification & Diagnosis	Common Profile

Process Data Input (Device to Master)

Subindex	Name	Offset	Length	Range	Datatype
1	SSC	0	1 bit	false=Low true=High	BooleanT

Octet	0							
Bit Offset	7	6	5	4	3	2	1	0
Subindex								1
								SSC

Process Data Output (Master to Device)

Subindex	Name	Offset	Length	Range	Datatype
N/A					

Parameter

Variable id	Name	index	subindex	Access Rights	defaultValue	Value Range	Description	Datatype	Data Storage
V_DirectParameters_1	Reserved	0 (0x0000)	1 (0x01)	RW				UIntegerT (8)	X
V_DirectParameters_1	Master Cycle Time	0 (0x0000)	2 (0x02)	RW			Communication: Current communication cycle duration used by the master. This value defines the process data cycle.	UIntegerT (8)	X
V_DirectParameters_1	Min Cycle Time	0 (0x0000)	3 (0x03)	RW			Communication: Minimum communication cycle duration supported by the device. This value defines the lowest possible process data cycle.	UIntegerT (8)	X
V_DirectParameters_1	M-Sequence Capability	0 (0x0000)	4 (0x04)	RW			Communication: Information on the structure and the supported features of the communication messages.	UIntegerT (8)	X
V_DirectParameters_1	IO-Link Revision ID	0 (0x0000)	5 (0x05)	RW			Communication: Identifier for the currently used communication protocol revision.	UIntegerT (8)	X
V_DirectParameters_1	Process Data Input Length	0 (0x0000)	6 (0x06)	RW			Communication: Information on width and features of the process input data (Process Data from Device to Master).	UIntegerT (8)	X
V_DirectParameters_1	Process Data Output Length	0 (0x0000)	7 (0x07)	RW			Communication: Information on width of the process output data (Process Data	UIntegerT (8)	X

							from Master to Device).		
V_DirectParameters_1	Vendor ID 1	0 (0x0000)	8 (0x08)	RW			Identification: Highest octet of the Vendor ID. Combined with the parameter Vendor ID 2, this parameter defines the 16-bit value of the unique Vendor ID as assigned by the IO-Link Community.	UIntegerT (8)	X
V_DirectParameters_1	Vendor ID 2	0 (0x0000)	9 (0x09)	RW			Identification: Lowest octet of the Vendor ID. Combined with the parameter Vendor ID 1, this parameter defines the 16-bit value of the unique Vendor ID as assigned by the IO-Link Community.	UIntegerT (8)	X
V_DirectParameters_1	Device ID 1	0 (0x0000)	10 (0x0A)	RW			Identification: Highest octet of the Device ID. Combined with the parameters Device ID 2 and 3, this parameter defines the 24-bit value of the vendor-specific Device ID.	UIntegerT (8)	X
V_DirectParameters_1	Device ID 2	0 (0x0000)	11 (0x0B)	RW			Identification: Middle octet of the Device ID. Combined with the parameters Device ID 1 and 3, this parameter defines the 24-bit value of the vendor-specific Device ID.	UIntegerT (8)	X
V_DirectParameters_1	Device ID 3	0 (0x0000)	12 (0x0C)	RW			Identification: Lowest octet of the Device	UIntegerT (8)	X

							ID. Combined with the parameters Device ID 1 and 2, this parameter defines the 24-bit value of the vendor-specific Device ID.		
V_DirectParameters_1	Reserved	0 (0x0000)	13 (0x0D)	RW				UIntegerT (8)	X
V_DirectParameters_1	Reserved	0 (0x0000)	14 (0x0E)	RW				UIntegerT (8)	X
V_DirectParameters_1	Reserved	0 (0x0000)	15 (0x0F)	RW				UIntegerT (8)	X
V_DirectParameters_1	System Command	0 (0x0000)	16 (0x10)	RW			Application: Command interface for devices without ISDU support. Validity and execution of commands are not confirmed.		X
V_SystemCommand	System Command	2 (0x0002)	0 (0x00)	WO			Command interface for applications. A positive acknowledge indicates the complete and correct finalization of the requested function.		X
V_VendorName	Vendor Name	16 (0x0010)	0 (0x00)	RO	di-soric GmbH & CO. KG		The vendor name that is assigned to a Vendor ID.	StringT (64)	X
V_VendorText	Vendor Text	17 (0x0011)	0 (0x00)	RO	SOLUTIONS. CLEVER. PRACTICAL.		Additional information about the vendor.	StringT (64)	X
V_ProductName	Product Name	18 (0x0012)	0 (0x00)	RO			Complete product name.	StringT (64)	X
V_ProductID	Product ID	19 (0x0013)	0 (0x00)	RO			Vendor-specific product or type identification (e.g., item number or model number).	StringT (64)	X
V_ProductText	Product Text	20 (0x0014)	0 (0x00)	RO	Inductive Proximity		Additional product information for the	StringT (64)	X

					Sensor		device.		
V_SerialNumber	Serial Number	21 (0x0015)	0 (0x00)	RO			Unique, vendor-specific identifier of the individual device.	StringT (16)	X
V_HardwareRevision	Hardware Revision	22 (0x0016)	0 (0x00)	RO			Unique, vendor-specific identifier of the hardware revision of the individual device.	StringT (64)	X
V_FirmwareRevision	Firmware Revision	23 (0x0017)	0 (0x00)	RO			Unique, vendor-specific identifier of the firmware revision of the individual device.	StringT (64)	X
V_ApplicationSpecificTag	Application-specific Tag	24 (0x0018)	0 (0x00)	RW	***		Possibility to mark a device with user- or application-specific information.	StringT (32)	X
V_ErrorCount	Error Count	32 (0x0020)	0 (0x00)	RO			Number of errors that occurred in the technology-specific application since power on or restart.	UIntegerT (16)	X
V_DeviceStatus	Device Status	36 (0x0024)	0 (0x00)	RO		0=Device is OK 1=Maintenance required 2=Out of specification 3=Functional check 4=Failure	Indicator for the current device condition and diagnosis state.	UIntegerT (8)	X
V_DetailedDeviceStatus	Detailed Device Status	37 (0x0025)	0 (0x00)	RO			List of all currently pending events in the device.	ArrayT (64)	X
V_ProcessDataInput	PD Input	40 (0x0028)	0 (0x00)	RO			Last valid process input data of the device.	ProcessDataIn UnionT	X
V_CP_FunctionTag	Function Tag	25 (0x0019)	0 (0x00)	RW	***		Possibility to mark a device with function-	StringT (32)	X

							specific information.		
V_CP_LocationTag	Location Tag	26 (0x001A)	0 (0x00)	RW	***		Possibility to mark a device with location-specific information.	StringT (32)	X
V_SSP_SSC_SP	SSC Param - SP	56 (0x0038)	0 (0x00)	RW	3	0=33 1=50 2=75 3=100	Defines the switchpoint within the detection range.	IntegerT (16)	X
V_SSP_SSC_Logic	SSC Config - Logic	57 (0x0039)	0 (0x00)	RW	0	0=High active 1=Low active	Defines the logical representation of the switching signal SSC in the process data.	UIntegerT (8)	X
V_SSP_TI_TeachResult	State	59 (0x003B)	1 (0x01)	RO	0	0=Idle 1=SP success 4=Wait for command 5=Busy 7=Error	Indicates the current state of the teach procedure.	UIntegerT (4)	X
V_SSP_TI_TeachResult	Flag SP TP1	59 (0x003B)	2 (0x02)	RO	false	false=Initial or not ok true=Ok	Indicates the current teach result for the teach point.	BooleanT	X
V_SSP_TI_TeachResult	Flag SP TP2	59 (0x003B)	3 (0x03)	RO	false	false=Initial or not ok true=Ok	Indicates the current teach result for the teach point.	BooleanT	X
V_Conf_SO1	Mode	64 (0x0040)	1 (0x01)	RW	1	0=Disabled 1=PNP 2=NPN 3=PP		UIntegerT (8)	X
V_Conf_SO1	Timer Mode	64 (0x0040)	3 (0x03)	RW	0	0=Disabled 1=T-on Delay 2=T-off Delay 3=T-on and T-off Delay 4=One Shot Leading Edge 5=One		UIntegerT (8)	X

						Shot Trailing Edge			
V_Conf_SO1	Delay Duration	64 (0x0040)	5 (0x05)	RW	100	1...32767		IntegerT (16)	X
V_TEMP	Maximum Temperature Warning	72 (0x0048)	1 (0x01)	RW		-50...125		IntegerT (16)	X
V_TEMP	Minimum Temperature Warning	72 (0x0048)	2 (0x02)	RW		-50...125		IntegerT (16)	X
V_MaxTemperature	Max Temperature Since Startup	205 (0x00CD)	0 (0x00)	RO				IntegerT (16)	X
V_MinTemperature	Min Temperature Since Startup	206 (0x00CE)	0 (0x00)	RO				IntegerT (16)	X
V_CurrentTemperature	Current Temperature	207 (0x00CF)	0 (0x00)	RO				IntegerT (16)	X
V_DetectCount	Number of Detections Since Startup	210 (0x00D2)	0 (0x00)	RO				IntegerT (32)	X

System Commands

Command dec	Command hex	Description
65	0x41	Teach SP
252	0xFC	
253	0xFD	
254	0xFE	
255	0xFF	

Errors

Error ID	Name	Description
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Events

Event Code	Name	Description
16384	Temperature fault	Overload
16912	Device temperature overrun	Clear source of heat
16928	Device temperature underrun	Insulate device