

SEFB61x_Muting

Multi-Beam Safety Light Array



Interface Protocol

IO-Link SEFB61x_Muting

Vendor ID

Product	hex	dec	hex (Bytes)	dec (Bytes)
wenglor sensoric GmbH	0x0057	87	00 57	0 87

Device ID

Product	hex	dec	hex (Bytes)	dec (Bytes)
SEFB612	0x310100	3211520	31 01 00	49 1 0
SEFB613	0x311100	3215616	31 11 00	49 17 0
SEFB614	0x312100	3219712	31 21 00	49 33 0

hex*	dec*	hex (Bytes)*	dec (Bytes)*
0x310101	3211521	31 01 01	49 1 1
0x311101	3215617	31 11 01	49 17 1
0x312101	3219713	31 21 01	49 33 1

* Valid for devices delivered from 10/2020 onward

IO-Link Version:	V1.1
Data Storage:	No
Blockparameter:	No
MinCycletime:	4,5 ms
SIO-Mode:	Yes
COM-Mode:	COM2
ISDU	Yes
Process data In (Device to Master)	8 Bytes
Process data Out (Master to Device)	—

Process Data-A (Length: 8 Byte)

Name	Byte	Length	Range	Unit
Output State	0	1 Byte	0...255: Bit0: OSSD-State Bit1: Acknowledgment prompt Bit2: Safety Field Penetration Bit3: Muting Active Bit4: Override Active Bit5: Weak Signal / Contamination Bit6: Ready Bit7: Synchronous Run	
Input State	1	1 Byte	0...63: Bit0: Input1 Bit1: Input2 Bit2: Input3 Bit3: Input4 Bit4: Input5 Bit5: Input6	
LBB (Last Beam Blocked)	2	1 Byte	0...1/2/3/4/255	
FBB (First Beam Blocked)	3	1 Byte	0...1/2/3/4/255	
NBB (Number of Beam Blocked)	4	1 Byte	0...1/2/3/255	
NCBB (Number of Cumulated Beams Blocked)	5	1 Byte	0...1/2/3/255	
NOBJ (Number of Objects)	6	1 Byte	0...1/2/255	
Device State	7	1 Byte	0...255: 0: normal Operation 1: parametrization PushButton (directly on the sensors) 2: parametrization IO-Link ≥ 10: Error Number	

Process Data-B (Length: 8 Byte)

Name	Byte	Length	Range	Unit
Output State	0	1 Byte	0...255: Bit0: OSSD-State Bit1: Acknowledgment prompt Bit2: Safety Field Penetration Bit3: Muting Active Bit4: Override Active Bit5: Weak Signal / Contamination Bit6: Ready Bit7: Synchronous Run	—
Input State	1	1 Byte	0...63: Bit0: Input1 Bit1: Input2 Bit2: Input3 Bit3: Input4 Bit4: Input5 Bit5: Input6 Bit6: Reserve Bit7: Reserve	—
Muting Sensor Time S1-S2	2	1 Byte	0...250	100 ms
Muting Sensor Time S3-S4	3	1 Byte	0...250	100 ms
Muting Time Lo-Byte	4	1 Byte	0...28800	sec
Muting Time Hi-Byte	5	1 Byte		
Muting State	6	1 Byte	0/50...90	—
Device State	7	1 Byte	0...0xFF: 0: normal Operation 1: parametrization PushButton (directly on the sensors) 2: parametrization IO-Link 3...9: unused Ab 10: Error Number	—

Parameter

Name	Index (hex)	Index (dec)	Sub-index	R/W	Length	Data Storage	Dynamic	Modify others	Default Value	Range
Identification										
Vendor Name	0x0010	16	0	RO	String				wenglor sensoric GmbH	
Vendor Text	0x0011	17	0	RO	String				the innovative family	
Product Name	0x0012	18	0	RO	String				SEFB61x	
Product ID	0x0013	19	0	RO	String				SEFB61x	
Product Text	0x0014	20	0	RO	String				Multi-Beam Safety Light Array	
Serial Number	0x0015	21	0	RO	String				—	
SAP Number	0x0042	66	0	RO	String [10]				—	0...
System Revision	0x0043	67	0	RO	String [2]				—	A...
Hardware Revision	0x0016	22	0	RO	String				—	
Firmware Revision	0x0017	23	0	RO	String				—	
Application Specific Name	0x0018	24	0	RW	String 32 Byte				***	
Parameter										
Device Settings										
System Command	0x0002	2	0	WO	Uint8			X	—	Factory Reset = 0x82 (130)
Device Access Locks	0x000C	12	0	RW	Uint16				0x0000	0...1: Bit 0: Parameter write access Locked
Parameterization Code *	0x0050	80	0	RO	String[4]				AAAA	AAAA...ZZZZ
Password Entry	0x0040	64	0	WO	Uint16				0	0...9999
Parameterization End	0x0041	65	0	RW	Uint8				0	0...2: 0: No 1: Save + Restart 2: Cancel + Restart
Password Change	0x0100	256	0	RW	Uin16				0...9999	0...9999
Identification	0x0101	257	0	RO	Uin16				3	0...65535
Basic Settings										
Code (Beam Coding)	0x0103	259	0	RW	Uint8				0	0: Off 1: On
RES (Restart Inhibit)	0x0104	260	0	RW	Unit8				0	0: Off 1: On
EDM (Contactor Monitoring)	0x0105	261	0	RW	Unit8				0	0: Off 1: On
Cascading	0x0106	262	0	RW	Uint8				0	0: Off 1: On
Muting Settings										
Mode	0x0110	272	0	RW	Unit8				0	0: Off 1: X (2-Sensor Cross) 2: L (2-Sensor Linear) 3: LSEQ (4-Sensor Linear Sequence) 4: LTME (4-Sensor Time Monitoring)
Time	0x0111	273	0	RW	Unit8				0	0: 300s 1: 8h
Belt Stop	0x0112	274	0	RW	Unit8				0	0: Off 1: On
Enable	0x0113	275	0	RW	Unit8				0	0: Off 1: On
Direction	0x0114	276	0	RW	Unit8				0	0: Off 1: A 2: B
End	0x0115	277	0	RW	Unit8				0	0: Off 1: ESPE
Partial	0x0116	278	0	RW	Unit8				0	0: Off 1: On
Full-Muting Enable	0x0117	279	0	RW	Unit8				0	0: Off 1: On

* This parameter set is available only for devices delivered from 10/2020 onward.

Name	Index (hex)	Index (dec)	Sub-index	R/W	Length	Data Storage	Dynamic	Modify others	Default Value	Range
Gap-Supression	0x0118	280	0	RW	Unit8				0	0: Off 1: 250 ms
Override	0x0119	281	0	RW	Unit8				0	0: Off 1: On
Teach In Settings										
Teach-In	0x011A	282	0	RW	Unit8				0	0: Cancel 1: Start 2: Stop
Teach-In Value	0x011B	283	0	RO	Unit16		X		0	0..9999
Display Settings										
Mode	0x0120	288	0	RW	Unit8				2	1: Standard 2: Energy
Display Screen	0x0121	289	0	RO	String[4]				—	ASCII Value
Expert Settings										
Signal Output	0x0131	305	0	RW	Unit8				1	0: Off 1: Restart 2: OSSD 3: Muting 4: Contamination 5: Synchron 6: Ready
Lamp	0x0132	306	0	RW	Unit8				0	0: Muting 1: All (Muting + OSSD)
Alignment Signal	0x0133	307	0	RO	Unit8				0	0: not detecting any emitter beams 1: Signal is weak 2: Signal is adequate 3: Signal is good 4: Signal is very good
Reset	0x0134	308	0	RW	Unit8				0	0: Off 1: Reset (Factory Settings)
SD-Card	0x0130	304	0	RW	Unit8				0	0: Off 1: Save 2: Load
SD-Card-State	0x0136	310	0	RO	uint8				0	0: Ok 1: WSD0 (no SD-Card present) 2: WSD1 (read/write access error on the SD-Card)
Process Data	0x0135	309	0	RW	Unit8				0	0: A (Measurement) 1: B (Muting)
Beam Settings										
Parametrized (ESPE)	0x0140	320	0	RO	Unit8[1]				0	Bit-State: Bit=0: Beam is evaluated Bit=1: Beam is blanked Byte-Status: Byte 0: Bit 0: Beam1 Byte 0: Bit 1: Beam12 Byte 0: Bit 2: Beam3 etc.
Actual	0x0141	321	0	RO	Unit8[23]				0	Bit-State: Bit=0: Beam not detected Bit=1: Beam detected Byte-State: Byte 0: Bit 0: Beam1 Byte 0: Bit 1: Beam2 Byte 0: Bit 2: Beam3 etc.
Beam Numbers	0x0142	322	0	RO	Unit8				2...4	2...4