

SEFG6xx Muting

Safety Light Curtains



Interface Protocol

IO-Link SEFG6xx 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)
Finger Protection				
SEFG671	0x320300	3277568	32 03 00	50 3 0
SEFG672	0x321300	3281664	32 13 00	50 19 0
SEFG673	0x322300	3285760	32 23 00	50 35 0
SEFG674	0x323300	3289856	32 33 00	50 51 0
SEFG675	0x324300	3293952	32 43 00	50 67 0
SEFG676	0x325300	3298048	32 53 00	50 83 0
SEFG677	0x326300	3302144	32 63 00	50 99 0
SEFG678	0x327300	3306240	32 73 00	50 115 0
SEFG679	0x328300	3310336	32 83 00	50 131 0
SEFG680	0x329300	3314432	32 93 00	50 147 0
SEFG681	0x32A300	3318528	32 A3 00	50 163 0
SEFG682	0x32B300	3322624	32 B3 00	50 179 0
Hand Protection				
SEFG651	0x320B00	3279616	32 0B 00	50 11 0
SEFG652	0x321B00	3283712	32 1B 00	50 27 0
SEFG653	0x322B00	3287808	32 2B 00	50 43 0
SEFG654	0x323B00	3291904	32 3B 00	50 59 0
SEFG655	0x324B00	3296000	32 4B 00	50 75 0
SEFG656	0x325B00	3300096	32 5B 00	50 91 0
SEFG657	0x326B00	3304192	32 6B 00	50 107 0
SEFG658	0x327B00	3308288	32 7B 00	50 123 0
SEFG659	0x328B00	3312384	32 8B 00	50 139 0
SEFG660	0x329B00	3316480	32 9B 00	50 155 0
SEFG661	0x32AB00	3320576	32 AB 00	50 171 0
SEFG662	0x32BB00	3324672	32 BB 00	50 187 0

hex*	dec*	hex (Bytes)*	dec (Bytes)*
0x320301	3277569	32 03 01	50 3 1
0x321301	3281665	32 13 01	50 19 1
0x322301	3285761	32 23 01	50 35 1
0x323301	3289857	32 33 01	50 51 1
0x324301	3293953	32 43 01	50 67 1
0x325301	3298049	32 53 01	50 83 1
0x326301	3302145	32 63 01	50 99 1
0x327301	3306241	32 73 01	50 115 1
0x328301	3310337	32 83 01	50 131 1
0x329301	3314433	32 93 01	50 147 1
0x32A301	3318529	32 A3 01	50 163 1
0x32B301	3322625	32 B3 01	50 179 1
0x320B01	3279617	32 0B 01	50 11 1
0x321B01	3283713	32 1B 01	50 27 1
0x322B01	3287809	32 2B 01	50 43 1
0x323B01	3291905	32 3B 01	50 59 1
0x324B01	3296001	32 4B 01	50 75 1
0x325B01	3300097	32 5B 01	50 91 1
0x326B01	3304193	32 6B 01	50 107 1
0x327B01	3308289	32 7B 01	50 123 1
0x328B01	3312385	32 8B 01	50 139 1
0x329B01	3316481	32 9B 01	50 155 1
0x32AB01	3320577	32 AB 01	50 171 1
0x32BB01	3324673	32 BB 01	50 187 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	1Byte	0...255: Bit0: OSSD-State Bit1: Acknowledgment prompt Bit2: Safety Field Penetration Bit3: Muting Activ Bit4: Override Activ Bit5: Weak Signal / Contamination Bit6: Ready Bit7: Synchronous Run	—
Input State	1	1Byte	0...63: Bit0: Input1 Bit1: Input2 Bit2: Input3 Bit3: Input4 Bit4: Input5 Bit5: Input6	—
LBB (Last Beam Blocked)	2	1Byte	0...180/255	—
FBB (First Beam Blocked)	3	1Byte	0...180/255	—
NBB (Number of Beam Blocked)	4	1Byte	0...179/255	—
NCBB (Number of Cumulated Beams Blocked)	5	1Byte	0...179/255	—
NOBJ (Number of Objects)	6	1Byte	0...3/255	—
Device State	7	1Byte	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	1Byte	0...255: Bit0: OSSD-State Bit1: Acknowledgment prompt Bit2: Safety Field Penetration Bit3: Muting Activ Bit4: Override Activ Bit5: Weak Signal / Contamination Bit6: Ready Bit7: Synchronous Run	—
Input State	1	1Byte	0...63: Bit0: Input1 Bit1: Input2 Bit2: Input3 Bit3: Input4 Bit4: Input5 Bit5: Input6 Bit6: Reserve Bit7: Reserve	—
Muting Sensor Time S1-S2	2	1Byte	0...250	100 ms
Muting Sensor Time S3-S4	3	1Byte	0...250	100 ms
Muting Time Lo-Byte	4	1Byte	0...28800	sec
Muting Time Hi-Byte	5	1Byte		
Muting State	6	1Byte	0/50...90	—
Device State	7	1Byte	0...0xFF: 0: normal Operation 1: parametrization PushButton (directly on the sensors) 2: parametrization IO-Link 3...9: unused ≥ 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				SEFG6xx	
Product ID	0x0013	19	0	RO	String				SEFG6xx	
Product Text	0x0014	20	0	RO	String				Safety Light Curtain	
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]				***	
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...0x000F: Bit 0: Parameter write access Locked Bit 1: unused (Data Storage locked) Bit 2: unused (Local parameterization Locked) Bit 3: Reserved
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	Unit8				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

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Name	Index (hex)	Index (dec)	Sub-index	R/W	Length	Data Storage	Dynamic	Modify others	Default Value	Range
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
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
Actual	0x0141	321	0	RO	Unit8 [1]				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.
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)

Name	Index (hex)	Index (dec)	Sub- index	R/W	Length	Data Storage	Dynamic	Modify others	Default Value	Range
Beam Settings										
Parametrized (ESPE)	0x0140	320	0	RO	Unit8[1]				0	Bit-State: Bit=0: Beam is evaluated Bit=1: Beam is blanked Byte-State: Byte 0: Bit 0: Beam1 Byte 0: Bit 1: Beam2 Byte 0: Bit 2: Beam3 etc.
Actual	0x0141	321	0	RO	Unit8 [1]				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				8...180	8...180

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