

SEFG6xx Muting + Blanking

Safety Light Curtain



Interface Protocol

IO-Link SEFG6xx Muting + Blanking

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				
SEFG631	0x32	50	320100	3277056
SEFG632	0x32	50	321100	3281152
SEFG633	0x32	50	322100	3285248
SEFG634	0x32	50	323100	3289344
SEFG635	0x32	50	324100	3293440
SEFG636	0x32	50	325100	3297536
SEFG637	0x32	50	326100	3301632
SEFG638	0x32	50	327100	3305728
SEFG639	0x32	50	328100	3309824
SEFG640	0x32	50	329100	3313920
SEFG641	0x32	50	32A100	3318016
SEFG642	0x32	50	32B100	3322112
Hand Protection				
SEFG611	0x32	50	320900	3279104
SEFG612	0x32	50	321900	3283200
SEFG613	0x32	50	322900	3287296
SEFG614	0x32	50	323900	3291392
SEFG615	0x32	50	324900	3295488
SEFG616	0x32	50	325900	3299584
SEFG617	0x32	50	326900	3303680
SEFG618	0x32	50	327900	3307776
SEFG619	0x32	50	328900	3311872
SEFG620	0x32	50	329900	3315968
SEFG621	0x32	50	32A900	3320064
SEFG622	0x32	50	32B900	3324160

IO-Link Version: V1.1
Data Storage: Yes
Blockparameter: No
SIO-Mode: Yes
COM-Mode: COM2

Finger Protection	Type number	MinCycleTime [ms]	DeviceCycleTime A [ms]	DeviceCycleTime B [ms]
SEFG631	0x01	4,5	3,990	4,006
SEFG632	0x11	4,5	4,890	4,906
SEFG633	0x21	4,5	5,790	5,806
SEFG634	0x31	4,5	6,690	6,706
SEFG635	0x41	4,5	7,590	7,606
SEFG636	0x51	4,5	8,490	8,506
SEFG637	0x61	4,5	9,390	9,406
SEFG638	0x71	4,5	10,290	10,306
SEFG639	0x81	4,5	11,190	11,206
SEFG640	0x91	4,5	12,090	12,106
SEFG641	0xA1	4,5	12,990	13,006
SEFG642	0xB1	4,5	13,890	13,906
Hand Protection				
SEFG611	0x09	4,5	3,570	3,586
SEFG612	0x19	4,5	3,990	4,006
SEFG613	0x29	4,5	4,470	4,486
SEFG614	0x39	4,5	4,890	4,906
SEFG615	0x49	4,5	5,370	5,386
SEFG616	0x59	4,5	5,790	5,806
SEFG617	0x69	4,5	6,270	6,286
SEFG618	0x79	4,5	6,690	6,706
SEFG619	0x89	4,5	7,170	7,186
SEFG620	0x99	4,5	7,590	7,606
SEFG621	0xA9	4,5	8,070	8,086
SEFG622	0xB9	4,5	8,490	8,506

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 Active Bit4: Override Active 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	—
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...0xFF: 0: normal Operation 1: parametrization PushButton (directly on the sensors) 2: parametrization IO-Link 3...9: unused Ab 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 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 sen-soric 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]				***	

Name	Index (hex)	Index (dec)	Sub-index	R/W	Length	Data Storage	Dynamic	Modify others	Default Value	Range
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
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
Blanking Mode	0x0102	258	0	RW	Unit8				1	1: Off (Full Resolution) 2: Reduced Resolution 3: Fix Blanking 4: Fix Balnking Tolerance 5: FloatingBlanking
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
Gap-Supression	0x0118	280	0	RW	Unit8				0	0: Off 1: 250 ms
Override	0x0119	281	0	RW	Unit8				0	0: Off 1: On

Name	Index (hex)	Index (dec)	Sub-index	R/W	Length	Data Storage	Dynamic	Modify others	Default Value	Range
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
Experte 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)
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)
Beam Settings										
Parametrized (ESPE)	0x0140	320	0	RO	Unit8 [1]				0	Bit-State: Bit=0: Beam is detected Bit=1: Beam is blocked 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