

Index	Subindex	Name	Length	Value Range	Default	Access Rights	Data Storage?	AOI
3-11								
		Device Access Locks						
12	1	Parameter (write) Access Lock	1	0 = off, 1 = on	0	rw	y	
	2	Data Storage Lock	1	0 = off, 1 = on	0	rw	y	
	3	Local Parameterization Lock	1	0 = off, 1 = on		rw	y	
	4	Local User Interface Lock	1	0 = off, 1 = on		rw	y	
13-15								
16		Vendor Name string		Banner Engineering Corporation		ro		
17		Vendor Text string		More Sensors. More Solutions.		ro		
18		Product Name string		K50 Pro Touch with IO-Link K50 Pro Device with IO-Link		ro		
19		Product ID string		K50PTCKQ K50PTCKQP K50PTFKQP K50PTKQ K50PTKQP K50PTVKQ K50PTVKQP K50PTFVKQP K50PFF50KQ K50PFF100KQ K50PFF100KQP K50PFF100KQPMA K50PFF200KQ K50PPBKQ		ro		
20		Product Text string		K50 Pro Touch with IO-Link K50 Pro Device with IO-Link		ro		
21		Serial Number				ro		
22		Hardware Revision				ro		
23		Firmware Version				ro		
24		App Specific Tag (user defined)				rw	y	
25-35								
36		Device Status	8	0 = Device is OK 1 = Maintenance required 2 = Out of specification 3 = Functional check 4 = Failure 5-255 = Reserved		ro		
37	1-6	Detailed Device Status	Array[6] of 3-octet			ro		
38-79								
80		Operating Mode	3	0 = Multicolor 1 = Four State Full Logic 2 = Advanced 3 = LED Control 4 = Demo	2	rw	y	
		Custom Animation Settings						
81	1	Custom Intensity (0 - 100%)	8	0-100	100	rw	y	
	2	Custom Flash Rate (0.5 - 25.5 Hz)	8	5-255	15	rw	y	
	3	Restrict To Gamut	8	0 = Off, 1 = On	0	rw	y	
		Input Settings						
82	1	Touch Sensitivity	2	0 = Low, 1 = Standard, 2 = High	1	rw	y	
	2	Function	1	0 = Momentary, 1 = Latched	0	rw	y	
	3	Mute Enable	1	0 = Off, 1 = On	0	rw	y	
	4	On Delay (ms)	8	0-65535	0	rw	y	

Index	Subindex	Name	Length	Value Range	Default	Access Rights	Data Storage?	AOI
83		Output Settings						
	1	Output State	1	0 = Normally Closed, 1 = Normally Open	true	rw	y	
	2	Off Delay Type	1	0 = Leading Edge, 1 = Trailing Edge	0	rw	y	
	3	Off Delay (ms)	16	0-65,535	0	rw	y	
84		State 1 Parameters						
	1	Animation Type	4	0 = Off 1 = Steady 2 = Flash 3 = Two Color Flash 4 = 50/50 5 = 50/50 Rotate 6 = Chase 7 = Intensity Sweep 8 = Color Sweep 9 = Sequence	1	rw	y	
	2	Animation Direction	1	0 = CCW, 1 = CW	false	rw	y	
	3	Animation Pattern	3	0 = Flash, 1 = Strobe, 2 = Three Pulse, 3 = SOS, 4 = Random	0	rw	y	
	4	Animation Speed	2	0 = Slow, 1 = Medium, 2 = Fast, 3 = Custom	1	rw	y	
	5	Reserved	2		0	rw	y	
	6	Off Delay Type	1	0 = Leading Edge, 1 = Trailing Edge	false	rw	y	
	7	Off Delay (ms)	16	0-65535	0	rw	y	
	8	Static Sequence Value (0-225)	8	0-225	0	rw	y	
	9	Sequence Start Location	3	0 = LED1, 1 = LED2, 2 = LED3, 3 = LED4, 4 = LED5, 5 = LED6, 6 = LED7, 7 = LED8	0	rw	y	
	10	Color 1	5	0 = Green 1 = Red 2 = Orange 3 = Amber 4 = Yellow 5 = Lime Green 6 = Spring Green 7 = Cyan 8 = Sky Blue 9 = Blue 10 = Violet 11 = Magenta 12 = Rose 13 = White 14 = Custom1 15 = Custom2	0	rw	y	
	11	Color 1 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y	
	12	Color 2	5	0 = Green 1 = Red 2 = Orange 3 = Amber 4 = Yellow 5 = Lime Green 6 = Spring Green 7 = Cyan 8 = Sky Blue 9 = Blue 10 = Violet 11 = Magenta 12 = Rose 13 = White 14 = Custom1 15 = Custom2	0	rw	y	
13	Color 2 Intensity	3	0 = High, 1 = Medium, 2 = Low, 3 = Off, 4 = Custom	0	rw	y		
85		State 2 Parameters (same structure as Index 84)						

Index	Subindex	Name	Length	Value Range	Default	Access Rights	Data Storage?	AOI
86		State 3 Parameters (same structure as Index 84)						
87		State 4 Parameters (same structure as Index 84)						
88		Custom Color 1 (subindex access not supported)						
	1	Red	8	0-255	255	rw	y	
	2	Green	8	0-255	255	rw	y	
	3	Blue	8	0-255	255	rw	y	
89		Custom Color 2 (subindex access not supported)						
	1	Red	8	0-255	255	rw	y	
	2	Green	8	0-255	255	rw	y	
	3	Blue	8	0-255	255	rw	y	

IO-Link Events

Events and Error Types are acyclic transmissions from the IO-Link device to the IO-Link master. Events can be error messages and/or warning or maintenance data.

Event Types		
Code	Type	Description
0 (0x0000)	Notification	No malfunction
20480 (0x5000)	Error	Device hardware fault/Device exchange

Error Types			
Code	Additional Code	Name	Description
128 (0x80)	0 (0x00)	Device application error - no details	Service has been refused by the device application and no detailed information of the incident is available
	17 (0x11)	Index not available	Access occurs to a not existing device
	18 (0x12)	Subindex not available	Access occurs to a not existing subindex
	32 (0x20)	Service temporarily not available	Parameter is not accessible because of the current state of the device application
	35 (0x23)	Access denied	Write access on a read-only parameter
	48 (0x30)	Parameter value out of range	Written parameter value is outside its permitted value range
	49 (0x31)	Parameter value above limit	Written parameter value is above its specific value limit
	51 (0x33)	Parameter length overrun	Written parameter length is above its predefined length
	52 (0x34)	Parameter length underrun	Written parameter length is below its predefined length
	53 (0x35)	Function not available	Written command is not supported by the device application
	54 (0x36)	Function temporarily unavailable	Written command is not available because of the current state of the device application
	65 (0x41)	Inconsistent parameter set	Parameter inconsistencies were found at the end of the block parameter transfer, device plausibility check failed