

Version: V1.3

Release Date: 2011-01-24

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## TAD

Vendor ID 310 d / 01 36 h  
Vendor Name ifm electronic gmbh  
Vendor Text www.ifm.com  
Vendor URL [http://www.ifm.com/ifmgb/web/io-link\\_down.htm](http://www.ifm.com/ifmgb/web/io-link_down.htm)  
Device ID 93 d / 00 00 5D h







## Communication




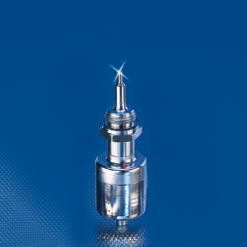
IO-Link Revision V1.0  
Minimum Cycle Time 9.500 ms

SIO Mode Supported Yes

## Device Variant

TAD191	Temperaturtransmitter -25 to 150 °C with diagnose output and backup function. Length 87.5 mm		
TAD991	Temperaturtransmitter -25 to 150 °C with diagnose output and backup function. Length 33 mm		

## Device Variant

TAD181	Temperaturtransmitter -25 to 150 °C with diagnose output and backup function. Aseptoflex Vario process connection, Length 87.5 mm		
TAD981	Temperaturtransmitter -25 to 150 °C with diagnose output and backup function. Aseptoflex Vario process connection, Length 33 mm		

**Process Data** Total BitLength = 15  
(IO-Link Processdata)

Name	Datatype	Bitoffset	Bitlength	Value Range	Gradient	Offset	Unit
Temperatur	IntegerT	0	15	-250 to 1500	0.1	0	°C

## Variables

Name	Description	Index	Subindex	Length	Access Rights	Default	Value Range	Gradient	Offset	Unit	Single Value
Vendor Name		16			ro	ifm electronic gmbh					
Vendor Text		17			ro	www.ifm.com					
Product Name		18			ro	TAD991					
Product ID		19			ro						
Serial Number		21			ro						

## Variables

Name	Description	Index	Subindex	Length	Access Rights	Default	Value Range	Gradient	Offset	Unit	Single Value
Hardware Revision		22			ro	AB					
Firmware Revision		23			ro	221					
Application Specific Name		24		30 Byte	rw						
Last Event		33			ro						
Event Qualifier			1	8 Bit							
Event Code			2	16 Bit							
OUx	Output configuration	69		16 Bit	rw	1					1 l = analogue output 4..20 mA 512 InEG = analogue output 20..4 mA
ASP	Analogue start point	70		16 Bit	rw	-17500	-23750 to 7500	0.004	70	°C	
AEP	Analogue end point	71		16 Bit	rw	20000	-11250 to 20000	0.004	70	°C	
drW	Drift warning threshold	72		16 Bit	rw	50	49 to 1250	0.004	0	°C	
drA	Drift alarm threshold	73		16 Bit	rw	125	49 to 1250	0.004	0	°C	
HI	Maximum value memory	76		16 Bit	ro	-10523					
LO	Minimum value memory	77		16 Bit	ro	-12000					
dOUx	Configuration of the diagnosis output (dOUx)	78		16 Bit	rw	2					1 nc 2 nc+ 4 no+ 8 Hb
FOU	Output response in case of fault	79		8 Bit	rw	1					0 OFF

## Variables

Name	Description	Index	Subindex	Length	Access Rights	Default	Value Range	Gradient	Offset	Unit	Single Value
FOU	Output response in case of fault	79		8 Bit	rw	1					1 ON
drEd	Characteristics of the redundancy switching (backup)	80		8 Bit	rw	1					1 Ondr 2 On 4 OFF
ddr	Delay of the drift detection	81		16 Bit	rw	3000	0 to 30000	0.01	0	min	
Uni	Display unit	85		8 Bit	rw	0					0 °C 1 °F 2 K 3 °Rank
PD_Descr	Description. how the Input-Processdata is built	225		56	ro	0					
Offset Binärwert			1	8 Bit		0					
Länge Binärwert			2	8 Bit		1					
UnitCode Analogwert			3	16 Bit		1001					
Exponent Analogwert			4	8 Bit		-2					
Offset Analogwert			5	8 Bit		1					
Länge Analogwert			6	7 Bit		15					

## Events

Code	Name	Type	Mode	Description
0	No malfunction	Message	SingleShot	-
6160	Error during Power-Up-Selftest	Error	AppearDisappear	Replace device
6176	Error sensor electronic	Error	AppearDisappear	Replace device

## Events

Code	Name	Type	Mode	Description
6177	Partial error of sensor electronic	Warning	AppearDisappear	Prepare to replace the device, sensor still works
35973	Short circuit on functional output	Warning	AppearDisappear	Check wiring
6208	Failure analog output unit	Error	AppearDisappear	Replace device
35907	Load for analogue output of too high impedance.	Error	AppearDisappear	Check wiring
36000	Analogue signal goes to the value 3.8 mA; no linear transmission of the measured value possible any more.	Warning	AppearDisappear	Measured value is below ASP value. Adjust a lower ASP value (AEP on OU2 = Ineg) if possible or increase process value.
36001	Analogue signal goes to the value 20.5 mA; no linear transmission of the measured value possible any more.	Warning	AppearDisappear	Measured value is above AEP value. Adjust a higher AEP value (ASP on OU2 = Ineg) if possible or decrease process value.
6304	Interruption measuring element 1. Measurement with other element is still possible (if enabled)	Warning	AppearDisappear	Prepare to replace the device, sensor still works
6305	Shortcut measuring element 1. Measurement with other element is still possible (if enabled)	Warning	AppearDisappear	Prepare to replace the device, sensor still works
16656	Excess ambient temperature	Warning	AppearDisappear	-
16672	Too low ambient temperature	Warning	AppearDisappear	-
6180	All sensor elements erroneous	Error	AppearDisappear	Replace device
6306	Interruption measuring element 2. Measurement with other element is still possible (if enabled)	Warning	AppearDisappear	Prepare to replace the device, sensor still works
6307	Shortcut measuring element 2. Measurement with other element is still possible (if enabled)	Warning	AppearDisappear	Prepare to replace the device, sensor still works
6308	Detected sensor drift exceeds warning level	Warning	AppearDisappear	First indication of drift detected, prepare replacement of the unit. Check if the parameter drW is programmed correctly
6309	Detected sensor drift exceeds alarm level	Error	AppearDisappear	Drift exceeds alarm threshold. Replace the device. Check if the parameter drA is programmed correctly

**Events**

<b>Code</b>	<b>Name</b>	<b>Type</b>	<b>Mode</b>	<b>Description</b>
20736	Supply	Error	AppearDisappear	-
16896	Temperature device	Error	AppearDisappear	-