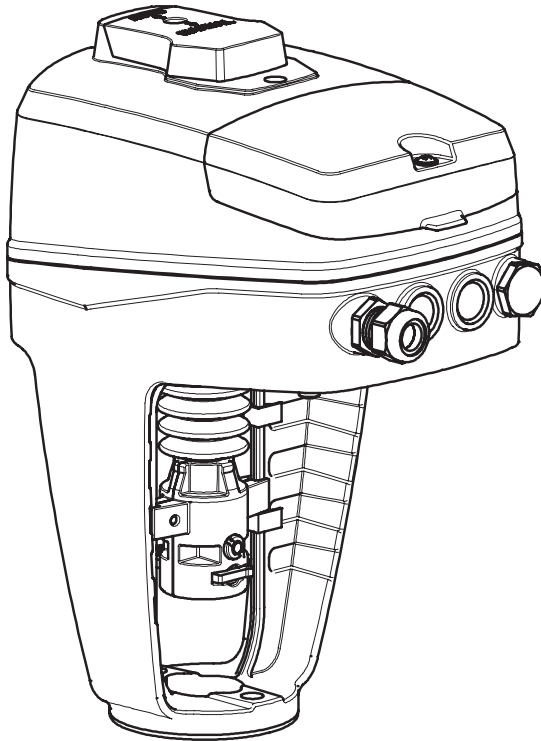


# TA-Slider 750/1250 BACnet MS/TP Protocol Implementation Conformance Statement – PICS



## General information

Date: 08/06/2017  
 Vendor Name: IMI Hydronic Engineering  
 Vendor ID: 926  
 Product Name: TA-Slider 750 Plus BACnet MS/TP,  
 TA-Slider 1250 Plus BACnet MS/TP  
 Product Model Number: 322226-X321X, 322227-X321X  
 Application Software Version: 1.0  
 Firmware Revision: 1.0.1; 1.1.0  
 BACnet Protocol Revision: 14  
 Product Description: Digitally configurable proportional push-pull actuator – 750 N,  
 Digitally configurable proportional push-pull actuator – 1250 N  
 BACnet Standard Device Profile: BACnet Application Specific Controller (B-ASC)

BACnet Interoperability Building Blocks (BIBBs) supported:

Data Sharing - ReadProperty-B (DS-RP-B)  
 Data Sharing - WriteProperty-B (DS-WP-B)  
 Device Management - DynamicDeviceBinding-B (DM-DDB-B)  
 Device Management - DynamicObjectBinding-B (DM-DOB-B)  
 Device Management - DeviceCommunicationControl-B (DM-DCC-B)\*  
 Device Management - TimeSynchronization (DM-TS-B)\*\*

Segmentation Capability: No  
 Data Link Layer Options: MS/TP master  
 Baud rates: Auto, 9600, 19200, 38400, 56700, 76800, 115200  
 Device Address Binding: No static device binding supported  
 Networking Options: None  
 Character Sets Supported: ISO 10646 (UTF-8)

\*) No password required

\*\*) Valid range for years is 2000 – 2099

## BACnet object description

### Device objects

Object type/ address	Name	Description	Access	Values
Device	Object ID	Value computed from the SN by default	RW	0 ... 4194303
Device	Object name	"TA-Slider 750-XXXXXXXX" or "TA-Slider 1250-XXXXXXXX" by default	RW	1 to 25 char
Device	Serial-number	8 characters	R	XXXXXXXX
Device	Max-master	Maximum value for the "poll for master"	RW	1 ... 127
Device	Location	Empty by default	RW	25 char max
Device	Object description	Valve name ("Unknown" by default)	R	25 char max

## Standard objects

Object type/ address	Name	Description	Access	Values	Units	Resolution
AI:0	Actual value	Actual valve position	R	0 ... 100.00	%	0.01
AI:1	Detected stroke SI	Stroke detected by the calibration process (SI)	R	1000 ... 25000	µm	1
AI:2	Detected stroke US	Stroke detected by the calibration process (US)	R	0.03937 ... 0.98425	in	0.0001
AI:3	Motor ontime	Motor operation time	R	0 ... Max uint32	s	1
AI:4	Actuator ontime	Actuator operation time	R	0 ... Max uint32	s	1
AI:5	Actuator distance SI	Actuator distance runs (SI)	R	0 ... Max uint32	mm	1
AI:6	Actuator distance US	Actuator distance runs (US)	R	0 ... Max uint32 in inch	in	0.1
AI:7	Flow SI****	Flow (l/h)	R	0 ... 4e9	l/h	1
AI:8	Flow US****	Flow (US)	R	0 ... 4e9	USGPM	0.0001
AV:0	Control value	Setpoint	R(W)	0 ... 100.00	%	0.01
AV:1	Communication address	MAC Address, Range: 0 → 127, Default: 127	RW	0 ... 127	-	1
AV:2	Cyclic control timeout	Raise an error if no control signal sent before timeout	RW	0 ... 60 (default: 0; meaning "no timeout")	minute	1
AV:10	Errors code	Errors code (0 means "No error")	R	0 ... 127	-	1
AV:11	Error 1	Oldest error log**	R	-7 ... 8	-	1
AV:12	Error 2	Error log**	R	-7 ... 8	-	1
AV:13	Error 3	Error log**	R	-7 ... 8	-	1
AV:14	Error 4	Error log**	R	-7 ... 8	-	1
AV:15	Error 5	Error log**	R	-7 ... 8	-	1
AV:16	Error 6	Error log**	R	-7 ... 8	-	1
AV:17	Error 7	Error log**	R	-7 ... 8	-	1
AV:18	Error 8	Error log**	R	-7 ... 8	-	1
AV:19	Error 9	Error log**	R	-7 ... 8	-	1
AV:20	Error 10	Newest error log**	R	-7 ... 8	-	1
BI:0	Forced position	Indicate if mechanical or electrical override	R	Yes / No		
BI:1	Binary Input*	Binary input state	[R]	On / Off		
BV:0	Valve opening type	Valve direction of the input signal	R	Push to Close/ Push to Open		
BV:1	Force calibration****	Run the calibration again	RW	On / Off		
BV:2	Bus Binary input	Bus Binary input state (effective depending on BusBinaryAction)	RW	On / Off		
BV:3	Relay 1*	Relay 1 based on configuration	[R(W)]	Activated / Deactivated		
BV:4	Relay 2*	Relay 2 based on configuration	[R(W)]	Activated / Deactivated		
MSI:0	Motor status	Current motor activity	R	1, 2, 3, 4, 5, 6, 7 (Stop, Retract, Extend, Calib, ManualOverride, Clogging, Error)		
MSI:1	Power type	Power source	R	Low, High, USB		
MSI:2	Characteristic	Actuator characteristic curve	R	Linear, Equal Percentage Modified, Inverted EQM		
MSI:3	Speed	Actuator speed	R	3 s/mm; 75 s/inch, 4 s/mm; 100 s/inch, 6 s/mm; 150 s/inch, 8 s/mm; 200 s/inch, 12 s/mm; 300 s/inch, 16 s/mm; 400 s/inch		
MSV:0	RS-485 Baud rate	Baud rate for the BACnet MS/TP communication	RW	Auto, 9600, 19200, 38400, 56700, 76800, 115200		

\*) Only with relay option.

\*\*) Timestamp of the error and short error description.

\*\*\*\*) Force calibration object value is only raised to "On" while a forced calibration is taking place. Object goes back to value "Off" upon completion of the forced calibration.

\*\*\*\*\*) Available from firmware version 1.1.0 (Main board: 4.0.0)

## Object processing

Object type	Optional properties	Writable properties
Analog Input	Min Pres Value Max Pres Value Resolution	Present Value Out of Service
Analog Value	Description Min Pres Value Max Pres Value Resolution	Present Value Out of Service
Binary Input	Inactive Text Active Text	Present Value Out of Service
Binary Value	Inactive Text Active Text	Present Value Out of Service
Device	Location Description Local Time Local Date Serial Number	Object Identifier Object Name Location Max APDU Length Accepted Accepted APDU Timeout Number of APDU Retries Max Master Max Info Frames
Multi-state Input	State Text	Present Value Out of Service
Multi-state Value	State Text	Present Value Out of Service

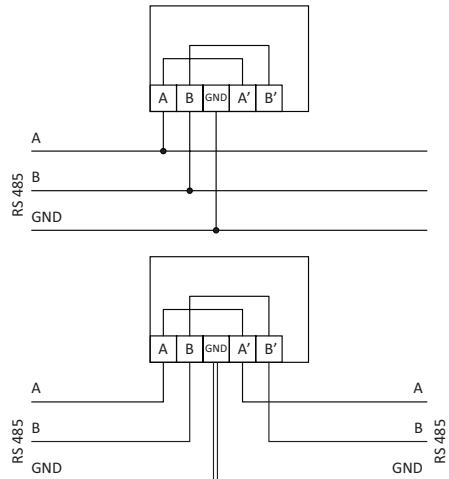
The properties Object name and Location of the Device Object support up to 25 characters (all other character strings are read-only).

The device does not support the CreateObject and DeleteObject service.

## RS-485 termination resistance

The jumper placed just behind the wire connector on the Communication board must be removed for activating the 120 Ohm RS-485 termination resistance.

## Wiring diagram



*We reserve the right to introduce technical alterations without prior notice.*



**Hydronic** Engineering

Note: A, B, A', B' and GND terminals are isolated from all other terminals.

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