INSPEKTO S70 V5.0.2 Bug report

In the newly release version of the INSPEKTO S70, V5.0.2 there was an issue found considering usage of TCP/IP connectivity protocol.

When using TCP/IP the INSPEKTO S70 **should** send one response for every command received, in which the command response is detailed after it has been completed.

In the INSPEKTO S70 software version V5.0.2 instead of the described above the INSPEKTO S70 will send multiple responses, which include information on steps required by the INSPEKTO S70 in order to perform the wanted operation.

For example, when sending an "OUT_PROFILE_ID" command in order to load a profile in the INSPEKTO S70, instead of receiving 1 response the INSPEKTO S70 will send 3 responses.

How to overcome

In order to bypass the issue, the controlling device should parse the received response and only react to a response in which the "System_Ready" field = 0001.

- "System_Ready" field is the most last 4 bits in the response message.

	Start Location	Data Length	Data Sample	Description	Range	Alignment
Header	0	6	S70_01	Header-ID	<any text>	Left
	6	10	INSPEKTO_C	Telegram-ID	<any text>	Left
	16	4	0112	Header Length	0112	Right
	20	8	00000214	Data Length	00000214	Right
	28	6	000001	Running number	000001-065535	Right
	34	14	YYYYMMddHHmmss	Date and time	<Date and time>	-
	48	32	INSPEKTO	Destination	<any text>	Left
	80	32	PLC	Source	<any text>	Left
Data	112	4	0001	IN_CUR_INSPECTION_MODE\	0000-0255 or 'NA'	Right
	116	64	OBJECT1256	IN_CUR_OBJECT_ID	<any text> or 'NA'	Left
	180	6	000001	IN_CUR_PROFILE_ID	000000-065535 or 'NA'	Right
	186	64	BATCH17	IN_CUR_BATCH_ID	<any text> or 'NA'	Left
	250	4	0000	IN_OBJECT_INSPECTION_RESULT	0000-0255 or 'NA'	Right
	254	64	000100.....0010	IN_ROI_DEFECT_LIST	0 or 1	-
	318	4	0000	IN_SYSTEM_ERROR	0000-0255 or 'NA'	Right
	322	4	0000	IN_SYSTEM_READY	0000-0255 or 'NA'	Right

- In addition to the "System_Ready" field, it is recommended to also monitor the "System_Error" field. When this field is different than "0000" it means that the last command received was **not** performed successfully.
- This field will be updated when "System_Ready" field is updated to "0001".

Example for A response message that should be ignored:

S70_01INSPEKTO_R011200000150000005202110140917 24PLC INSPEKTO
0002000000000000000000000000000000000000000000000000000000000000000000240228
000034TestBatchID
0002000000000000000000000000000000000000000000000000000000000000000000000000
00000000

		Start Location	Data Length	Value
Header	Header-ID	0	6	S70_01
	Telegram-ID	6	10	INSPEKTO_R
	Header Length	16	4	0112
	Data Length	20	8	00000150
	Running Number	28	6	000003
	Date and Time	34	14	20211014091532
	Destimation	48	32	PLC
	Source	80	32	INSPEKTO
Data	IN CUR INSPEKTION MODE	112	4	0002
	IN CUR OBJECT ID	116	64	0000000000000000000000000000000000000000000000000000000000000240228
	IN CUR PROFILE ID	180	6	000034
	IN CUR BATCH ID	186	64	TestBatchID
	N OBJECT INSPECTION RESUL	250	4	0002
	IN ROI DEFECT LIST	254	64	0000000000000000000000000000000000000000000000000000000000000000
	IN SYSTEM ERROR	318	4	0000
	IN SYSTEM READY	322	4	0000

- As seen, the last bit which is the “System_Ready” bit = 0, which means that the INSPEKTO S70 is still working, and not ready to receive new commands.

Example of a final response message that should be acted on:

S70_01INSPEKTO_R011200000150000005202110140917 24PLC
INSPEKTO
0002000000000000000000000000000000000000000000000000000000000000000000240228
000034TestBatchID
0002000000000000000000000000000000000000000000000000000000000000000000000000
00000001

		Start Location	Data Length	Value
Header	Header-ID	0	6	S70_01
	Telegram-ID	6	10	INSPEKTO_R
	Header Length	16	4	0112
	Data Length	20	8	00000150
	Running Number	28	6	000003
	Date and Time	34	14	20211014091532
	Destimation	48	32	PLC
	Source	80	32	INSPEKTO
Data	IN CUR INSPEKTION MODE	112	4	0002
	IN CUR OBJECT ID	116	64	0000000000000000000000000000000000000000000000000000000000000240228
	IN CUR PROFILE ID	180	6	000034
	IN CUR BATCH ID	186	64	TestBatchID
	N OBJECT INSPECTION RESUL	250	4	0002
	IN ROI DEFECT LIST	254	64	0000000000000000000000000000000000000000000000000000000000000000
	IN SYSTEM ERROR	318	4	0000
	IN SYSTEM READY	322	4	0001

- As seen, the last bit, which is the “System_Ready” bit =1, which means that the INSPEKTO S70 is done performing the last command, has updated all of the data fields, and ready to receive a new command.