Integration document for 2N Helios IP intercoms

This document describes how can 2N Helios IP intercoms be integrated into 3rd party systems.

Describes current status, January 2013.

SIP 2.0

– standardized SIP messages according to RFC 3261

HTTP commands *(part of Enhanced Integration license)*

– All switches in Helios IP can be controlled by HTTP commands. This feature has to be allowed in configuration menu. HTTP command for switch control is:
http://helios_ip_address/enu/lockstate.xml.p?lockXstate=Y
X is the switch number (1-4) and Y is 0 for switch off, 1 for switch on and 2 for change over.

Optionally you can use the parameter **answer** for a configurable answer to this request:
http://helios_ip_address/enu/lockstate.xml.p?lockXstate=Y&answer=text, where **text** is the answer.

- Optionally also other functions of HIP can be controlled with HTTP commands, see manual for Automation feature for details.

- Helios IP can control external IP devices by HTTP commands. Those commands are not given and their form can be customized.

RTSP server *(part of Enhanced Video license)*

– Video streaming from Helios IP. This feature has to be activated in configuration menu.
– When enabled, one client from predefined address, or four anonymous RTSP clients can connect.
– All clients get same content in the same format which is defined in Helios IP configuration.

SMTP client *(part of Enhanced Integration license)*

– Email sending in case of unanswered call.

Output relays *(up to 4, depends on installed hardware)*

	Force	Safety	Uni	Vario
1 (on board)	Passive and active	Passive and active	Passive and active	Passive or active
2 Additional Switch	Passive and active	Passive and active	-	Passive
3 Card Reader module	Passive	-	-	Passive

4 Card Reader module	Active	-	-	Passive

Passive output: 30V/2A, AC/DC (relay output)
Active output Helios IP Force, Safety and Uni: 12V/700mA DC (can power standart electrical lock)
Active output Helios IP Vario: 12V/900mA DC (can power standart electrical lock)

Note: With Helios IP Force, either Additional Switch or Card reader can be used, not both at the same time

RFID card reader

Accepted cards:
EM4100 / EM4102 cards
26-bit and 37-bit HID Proximity cards
Working frequency: 125kHz

Wiegand *(only with RFID card reader)*

- Input / Output (as programmed). 26 bits with adjustable facility code.

RS-485 *(only with RFID card reader)* – not activated yet

Maximum output voltage: 4.7 V
Minimum output voltage (into load): 1.5 V
Receiver input range: 6 V
Receiver sensitivity: 300 mV
Terminating resistance: 120 ohm (optional)

Logical inputs *(only with RFID card reader)*

Active mode – requires external voltage
• UIN-ON = min +2.5 V
• UIN-OFF = max +1.5 V
• UIN max = +48 V
• IIN (UIN +48 V) = max 1 mA
Passive mode – requires external contact only
• UOUT = approx. 8.3 V
• ILOOP = approx. 0.5 mA

ONVIF *(part of Enhanced Integration license)*

- Protocol enabling use of Helios IP as one of industrial surveillance cameras.
- This feature has to be enabled in configuration menu and properly set.