

# SIS Gateway NG : New Generation

Life Is On

**Schneider**  
Electric

# Table of contents

SIS Gateway NG's  
Features

1

Hardware and Electrical  
Characteristics

2

Technical  
Characteristics

3

New  
Generation

4

Compliance  
and standards

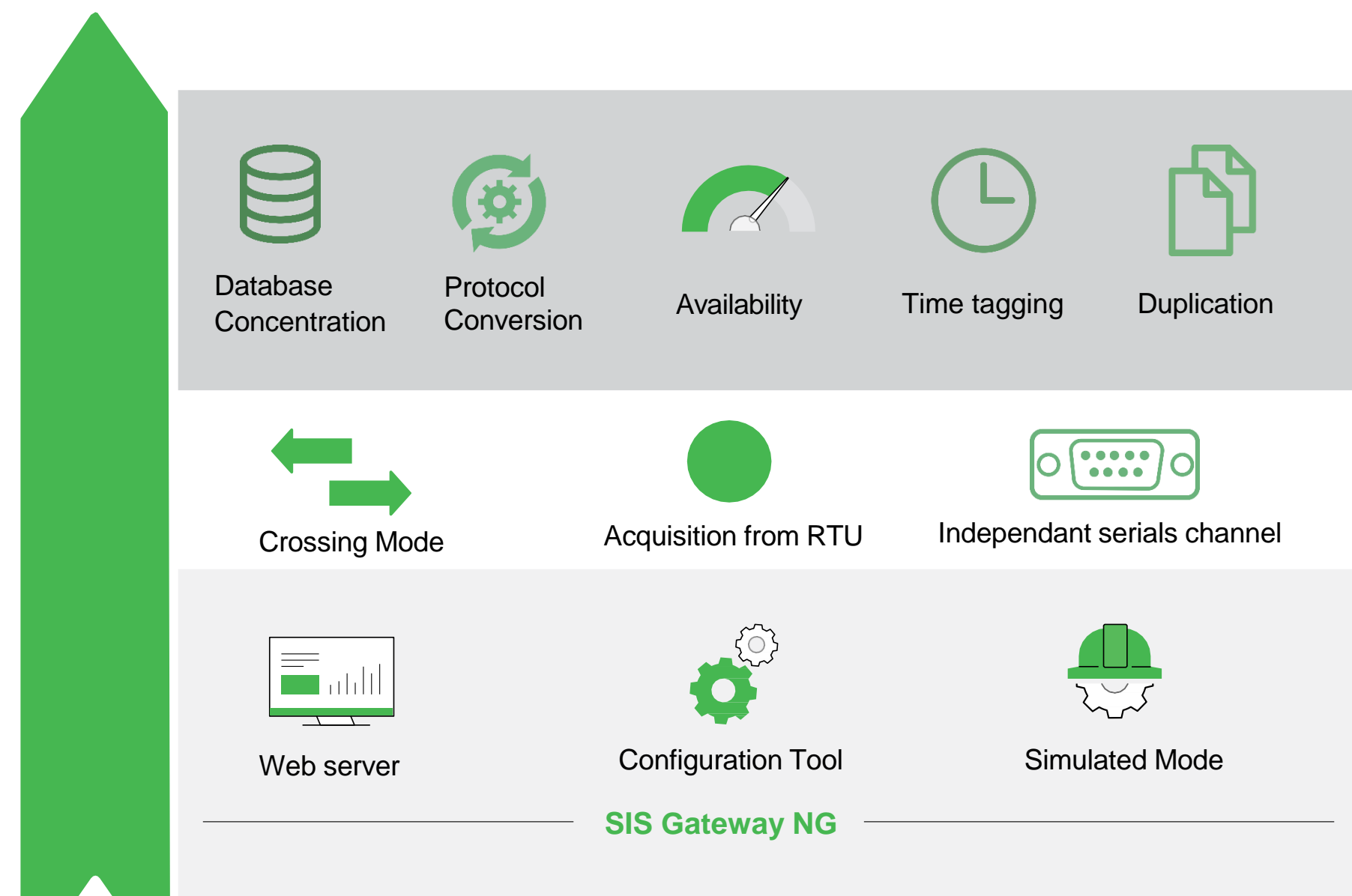
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# SIS Gateway NG's Features



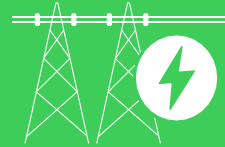
# SIS Gateway NG's Features

- Database concentration : each TCP client (supervisors, PLC...) connected to the gateway which has its database to optimise its own needs,
- Protocol conversion : bi-directional interface between some serial type networks and an Ethernet network
- Availability of communication with terminal equipment : management of communication with the bicontroller RTU and Substation Controller redundancy
- Time tagging of information from RTU which does not offer this functionality,
- Duplication of time tagged events from RTU for each TCP subscriber,
- Crossing mode with frame priority access from TCP client,
- Acquisition of information from RTU (less or equal to 240 RTU),
- SISGWConfig: File configuration tool for Gateway setting, firmware update, TCP/IP settings
- Serials channels are independent and used in parallel (16 RS Ports),
- Web server integrated enabling to access to communication diagnostics, internal variable status,
- Simulated mode: RTU , Internal Database modification, Avalanche, control.....



# Hardware and Electrical Characteristics

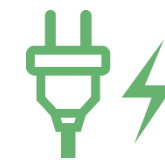
# Hardware and Electrical Characteristics



Electrical



Hardware



Power supply : 90/264 Volts AC, 50/60Hz or 12/60 Volts DC



Consumption : 20mA with 220Volts AC



Galvanic insulation of serial port



# Hardware and Electrical Characteristics



Electrical



Hardware



Enclosure : IP20



Storage : not downgraded of  $-25\text{ }^{\circ}\text{C}$  to  $+70\text{ }^{\circ}\text{C}$



Altitude : works from 0 to 2000 m



Temperature : from  $0\text{ }^{\circ}\text{C}$  to  $55\text{ }^{\circ}\text{C}$



Hygroscoy : from 10 to 95% without condensation



Strength to impacts : IEC 60950 500g sphere: 1.3 m drop



Fix in cubicle : Rack 19' for the 16 ports version



Overall dimension in cm : 43,5x6x27,5



Weight : 3,8kg



# Technical Characteristics



# Technical Characteristics



SISGW NG



Serial Ports



Front Panel  
Display



Number of TCP client : less or equal to 16  
Number of Ethernet port : 2 (connector industry RJ45)

Serial protocol :

- Master Modbus
- IEC60870-5-101 (Master/Slave)

Ethernet Protocol :

- Modbus TCP client and server, IO Scanner
- IEC60870-5-104 (Server)

Concentrated configuration : Automatic = Detail DBB (Excel file generated)

Operating system : Real time Linux

Over number of RTU : 240 (16 ports)

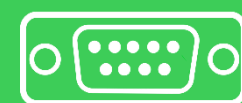
Maintenance : serial port in front face

Hour synchronisation : NTP client

# Technical Characteristics



SISGw NG



Serial Ports

Front Panel  
Display

RS 485 in 2 or 4 wires (Industrial connector DB9)

RS 232 in 3 wires (Industrial connector DB9)

RS 422 in 4 wires (Industrial connector DB9)

Bias current for the serial line included

End of the line resistance included

Speed: 300, 600, 1200, 2400, 4800, 9600, 19200 and 38400 bps, Parameter setting by configuration file

Parity + shutdown: parameter setting by configuration file

Each serial port can have different characteristics.



# Technical Characteristics



SISGw NG



Serial Ports



**Front Panel Display**



Ethernet network activity, Connection to the Ethernet network

Ethernet network flow rate (10/100Mbits)

Activity of each serial port

State of a redundant (active or passive) substation control torque

Power supply, Hardware error

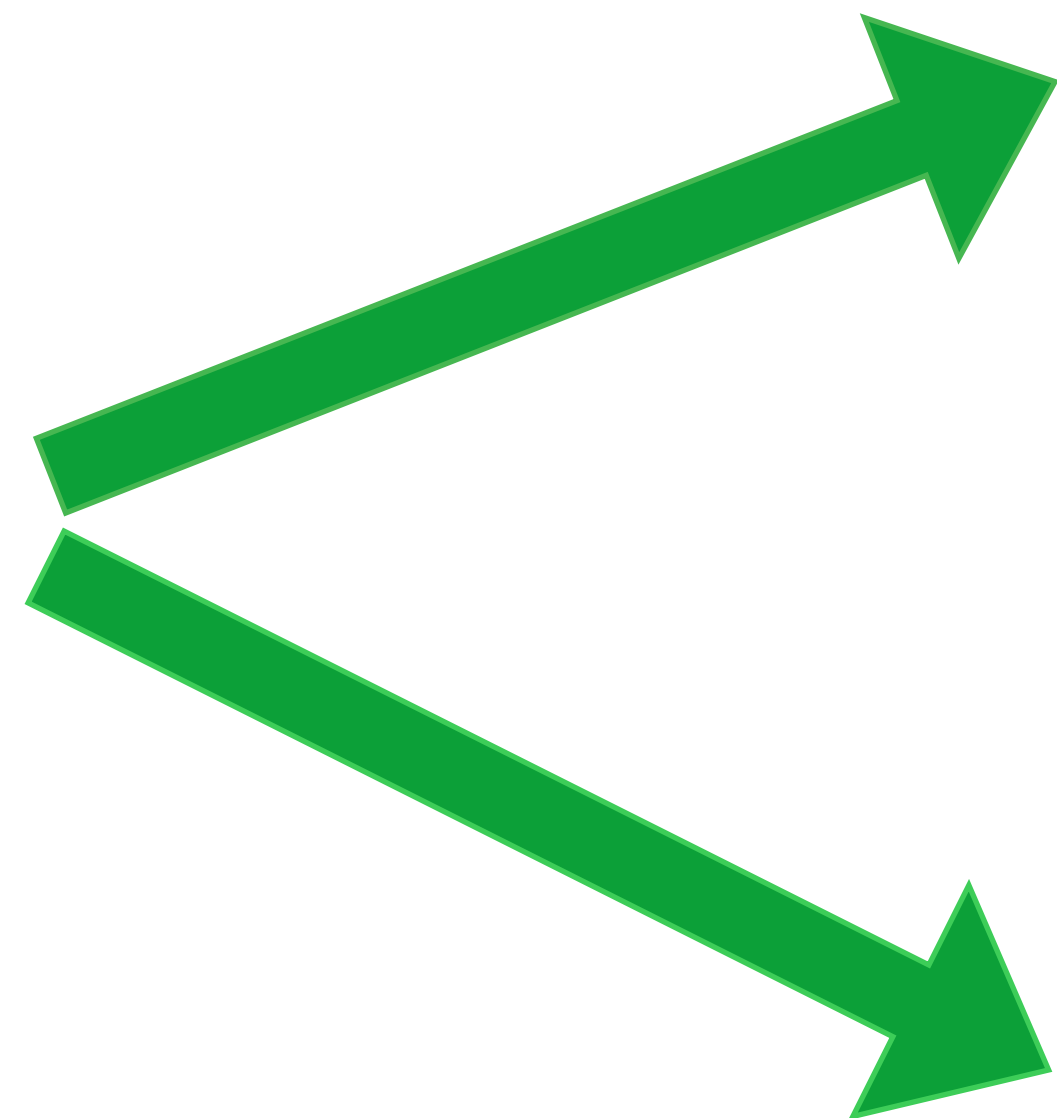


# New Generation

# Evolve to SISGw New Generation

## Old SIS Gateway :

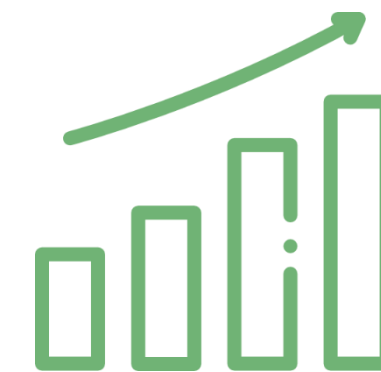
- Electrical components no more available
- Complicated maintenance, lack of resources



## Replace your SIS by the SIS Gateway New Generation :



- **Plug and play solution**
- New electronics components (respecting the current standard)
- Same size and weight : easy to install
- Same ethernet ports
- Same serial ports
- Same database : No application to modify (PLC, HMI, DCS, IED,..)
- Database transfer managed by SE Experts



## Replace your gateway by another gateway :

- **Not plug and play solution**
- Different database
- Modification on HMI, PLC,DCS,IED requeried

**Schneider is committed to support this transition**

# Compliance and Standards



# Compliance and Standards



CE

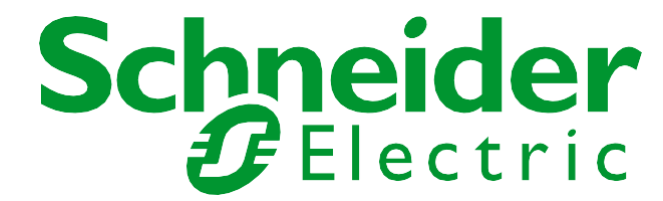
EN55022 + A1 + A2 – CISPR 22 + A1 + A2

EN55024, EN61000-6-2 à EN61000-6-6, EN61000-6-11

EN60950-1

Vibration and damp heat test

Life Is On



SIS Gateway NG



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