Inventec
NX-H5001

Open, Smart, Agile

Highlights

- Reduce wiring costs significantly.

- Accelerate maintenance and diminish risks.

- Shorten production line changeover time.

- Support various IoT systems protocol.

- Improve networking maintenance efficiency.

Whole New Way to Diminish Cabling TCO

IO Gateway connects multiple machineries with numerous Ethernet cable looks common but it will cost up Cabling TCO and maintenance difficulty.

Such as in PCBA Plant or Semiconductor Fab, vendor needs to apply Working At Height permit and spends time in Safety Training when they come every time.

Cutting Edge Cabling TCO Optimization

Distributed Building Block Architecture connects multiple Smart Edge Gateway NX-H5001 serially which gives NX-H5001 the shortest manufacturing machinery connection length specialty also transfer IoT Data and Power consecutively. It's the way to minimize cabling cost and diminish risky working at height necessity.lightweight all-in-one machine which greatly reduces the complexity of network deployment and has comprehensive advantages such as flexibility and rapid deployment.

Flexible and Speedy Changeover Time

Production line changeover time is always a concern, IT Team needs to reserve more or deploy new Ethernet cable in legacy networking architecture. Smart Edge Gateway NX-H5001 works in Distributed Building Block Architecture which gives flexibility and changeover time saving advantage.

Various IoT System Interconnection

Smart Edge Gateway NX-H5001 supports SECS and Modbus TCP for MES; TPMS and CMS system interconnection also supports RS-232 / RS-422 / RS-485 for attaching manufacturing machinery which simplifies heterogeneous IoT System connection.

Improve Cost Saving by Lower Maintenance Time

Shorten Ethernet cabling will not only save construction TCO but also save maintenance time especially Working At Height won't be seen as a imperative in further, it's ideal solution to improve ROI and Safety.

About Inventec

Since its founding in 1975, Inventec has grown from an early manufacturer of computers and telephones to a leading design manufacturer of notebooks, servers, and wireless communication products. With the advent of the 5G generation, Inventec is expanding its capabilities in 5G private network system integration and architecture, transforming its world-class manufacturing facilities into 5G smart factories.

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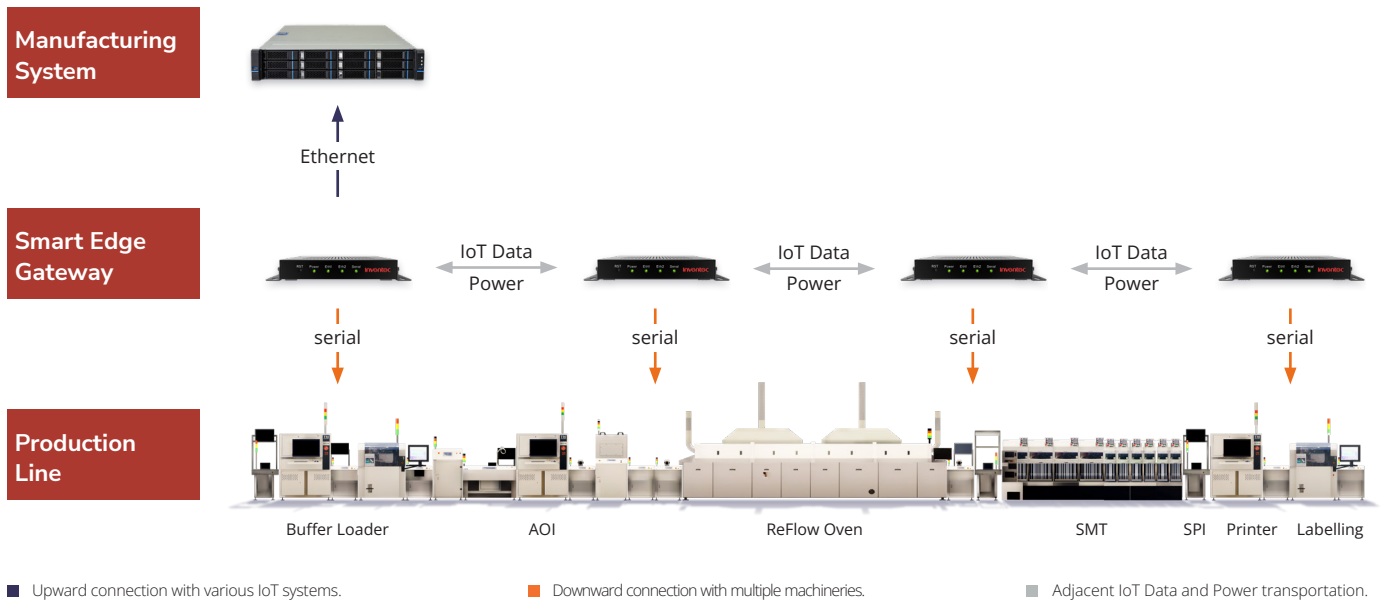**Learn more of Inventec 5G Smart Factory**

![Inventec 5G]

NX-H5001 | Product Specifications

Expansion Slot	Storage (OS) 1x Micro-SD slot (up to 32GB)
Device Cascade	4+ cascaded layers with power
Power Supply	12 ~ 24V Wide Range DC Input
Thermal Design	Fan-less
Chassis Dimension	(W) 150 x (D) 120 x (H) 26.5 mm
Operating Temperature	+5℃ ~ +60 ℃
Operating Humidity	10% ~ 90%
OS Support	Linux / Yocto Project

SoC	NXP i.MX93 Applications Processor Family ・ Arm® Cortex®-A55 @ 1.7 GHz ・ 32 KB L1 Instruction Cache, 32 KB L1 Data Cache ・ 64 KB per-core L2 cache Memory ・ 1GB LPDDR4 with inline ECC
I/O Interface	Front ・ 1 xpower/health status LED ・ 2xethernet status LED ・ 1 xserial port status LED Rear ・ 2x RJ-45 100Mbps ・ 1 x RJ-45 (RS-232/RS-422/RS-485 with Isolation) ・ 2x PCB terminal connector (DC Power In/Out)

NX-H5001 | Distributed Building Block Architecture

Manufacturing System

Ethernet

Smart Edge Gateway

IoT Data / Power — IoT Data / Power — IoT Data / Power

serial   serial   serial   serial

Production Line

Buffer Loader   AOI   ReFlow Oven   SMT   SPI   Printer   Labelling

■ Upward connection with various IoT systems.   ■ Downward connection with multiple machineries.   ■ Adjacent IoT Data and Power transportation.

NX-H5001 | Chassis Dimension

26.5

RST   Power   Eth1   Eth2   Serial   Inventec

|-------------- 150 mm --------------| |---------- 120 mm ---------| |-------------- 150 mm --------------|

Output   Eth2   Serial   Eth1   Input