

# Serial Device Servers

At ATOP we understood that it can be difficult to integrate various application needs. So, we develop solutions that bring interoperability between various hardware and software platforms. In addition, we develop with a product strategy in mind, so that flexibility and network scalability are factored in to provide solutions that are fit for the future.

## Families



### Entry Level

A low-cost, hardened hardware device for serial server applications in standard operating environments in normal temperature ranges, with basic functionalities and semi-industrial EMC protection.



### Wireless

Designed to equip serial server functionality with wireless connectivity, our wireless devices support 3G and 4G or IEEE 802.11abgn and IEEE 802.11bgn.



### Advanced

By featuring a high-powered industrial CPU and high EMC protection at Levels 3 to 5 or IEC61850-3, these advanced serial servers provide performance and scalability for Modbus Gateways, Modbus Concentrators, Protocol Gateways, and programmable environment support (SDK), in which you can write your own software in C or build your own IIoT application with a visual building-block tool.



### Enterprise

Fanless and industrial, but with high port density, these devices are helpful to be used to remotely manage via console switches or routers deployed in large data centers without the physical operator needed to be on site.



## Serial Device Servers

|                                     | Entry-level                                                                       |                                                                                   |                                                                                   | Wi-Fi                                                                             |                                                                                    | 4G                                                                                  | Advanced                                                                            |                                                                                     |
|-------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                     |  |  |  |  |  |  |  |  |
| <b>General Information</b>          | <b>NEW!</b>                                                                       | <b>NEW!</b>                                                                       | <b>NEW!</b>                                                                       |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Model Number                        | SE5201C                                                                           | SE5201                                                                            | SE5202                                                                            | SW5501/2                                                                          | SW5501/2C                                                                          | SE5901B                                                                             | SE5901                                                                              | SE5904D                                                                             |
| <b>Network Interfaces</b>           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Total number of ports               | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                  | 1                                                                                   | 2                                                                                   | 2                                                                                   |
| Total Fast Ethernet                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | -                                                                                 | 1                                                                                  | -                                                                                   | 2                                                                                   | (2)                                                                                 |
| 10/100 BaseT(X)                     | 1                                                                                 | 1                                                                                 | 1                                                                                 | -                                                                                 | 1                                                                                  | -                                                                                   | 2                                                                                   | (2)                                                                                 |
| 100 Base-X (SFP)                    | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                  | -                                                                                   | -                                                                                   | -                                                                                   |
| Total Gigabit                       | -                                                                                 | -                                                                                 | -                                                                                 | 1                                                                                 | -                                                                                  | 1                                                                                   | -                                                                                   | (2)                                                                                 |
| 10/100/1000 BaseT(X)                | -                                                                                 | -                                                                                 | -                                                                                 | 1                                                                                 | -                                                                                  | 1                                                                                   | -                                                                                   | -                                                                                   |
| 100/1000 Base-X SFP                 | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                  | -                                                                                   | -                                                                                   | (2)                                                                                 |
| Wi-Fi interface                     | -                                                                                 | -                                                                                 | -                                                                                 | 2.4/5GHz                                                                          | 2.4GHz                                                                             | -                                                                                   | -                                                                                   | -                                                                                   |
| 3G/4G interfaces                    | -                                                                                 | -                                                                                 | -                                                                                 | •                                                                                 | •                                                                                  | •                                                                                   | -                                                                                   | -                                                                                   |
| <b>Network Redundancy</b>           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| RSTP redundant ports                | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                  | -                                                                                   | 2                                                                                   | 2                                                                                   |
| <b>Serial Ports</b>                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Number of ports                     | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1/2                                                                               | 1/2                                                                                | (1)/(2)                                                                             | 1                                                                                   | 4                                                                                   |
| RS-232 RS-422 RS-485 full func.     | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1/2                                                                               | 1/2                                                                                | 1 (RS-232/485)                                                                      | 1                                                                                   | 4                                                                                   |
| RS-232 only                         | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                  | 1 (only IO vers.)                                                                   | -                                                                                   | -                                                                                   |
| Serial port Isolation               | -                                                                                 | -                                                                                 | 3kV (Optional)                                                                    | 3kV (Optional)                                                                    | -                                                                                  | -                                                                                   | -                                                                                   | 3kV (Optional)                                                                      |
| Serial port connector               | DSub9/TB                                                                          | DSub9/TB                                                                          | DSub9/TB                                                                          | DSub9/TB                                                                          | DSub9/TB                                                                           | DSub9/TB                                                                            | DSub9/TB                                                                            | DSub9/TB                                                                            |
| <b>Other interfaces</b>             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Digital Inputs                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 2 (Optional)                                                                        |                                                                                     |                                                                                     |
| Digital Outputs                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 2 (Optional)                                                                        |                                                                                     |                                                                                     |
| Relay Output                        |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 1                                                                                   |
| <b>Power Supply input</b>           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Power Input                         | 5 VDC                                                                             | 5 & 9~48 VDC                                                                      | 5 & 9~48 VDC                                                                      | 9~48 VDC                                                                          | 9~48 VDC                                                                           | 9~48 VDC                                                                            | 9~48 VDC                                                                            | 12~48 VDC                                                                           |
| Power PoE 802.3af (PD)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     | Optional                                                                            | Optional                                                                            |
| AC power input                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| High Voltage DC power input         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Power Redundancy                    |                                                                                   | •                                                                                 | •                                                                                 |                                                                                   |                                                                                    |                                                                                     |                                                                                     | •                                                                                   |
| <b>Mechanical</b>                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Installation                        | Field-Mount                                                                       | Field-Mount                                                                       | Field-Mount                                                                       | DIN-Rail                                                                          | DIN-Rail                                                                           | DIN-Rail                                                                            | DIN-Rail                                                                            | DIN-Rail                                                                            |
| Ingress Protection                  | IP30                                                                              | IP30                                                                              | IP30                                                                              | IP30                                                                              | IP30                                                                               | IP30                                                                                | IP30                                                                                | IP30                                                                                |
| Dimensions (L x H x D) in mm        | 65 x 78 x 27                                                                      | 65 x 78 x 27                                                                      | 75 x 85 x 28                                                                      | 7 x 110 x 90                                                                      | 7 x 110 x 90                                                                       | 32 x 110 x 90                                                                       | 32 x 122 x 92                                                                       | 55 x 145 x 113                                                                      |
| <b>Supported Temperatures</b>       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Operations Temperature              | -40~70° C                                                                         | -40~70° C                                                                         | -40~70° C                                                                         | -10~60° C                                                                         | -10~60° C                                                                          | -40~70° C                                                                           | -40~85° C                                                                           | -40~85° C                                                                           |
| Storage Temperature                 | -40~85° C                                                                         | -40~85° C                                                                         | -40~85° C                                                                         | -40~85° C                                                                         | -40~85° C                                                                          | -40~85° C                                                                           | -40~85° C                                                                           | -40~85° C                                                                           |
| <b>Serial Server</b>                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| TCP Client (max connections)        | 1/VCOM                                                                            | 1/VCOM                                                                            | 1/VCOM                                                                            | 2/VCOM                                                                            | 2/VCOM                                                                             | 2/VCOM                                                                              | 2/VCOM                                                                              | 2/VCOM                                                                              |
| TCP Server (max connections)        | 1/VCOM                                                                            | 1/VCOM                                                                            | 1/VCOM                                                                            | 4/VCOM                                                                            | 4/VCOM                                                                             | 4/VCOM                                                                              | 4/VCOM                                                                              | 4/VCOM                                                                              |
| UDP (ranges)                        | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                  | 4                                                                                   | 4                                                                                   | 4                                                                                   |
| VirtualCOM                          | •                                                                                 | •                                                                                 | •                                                                                 | •                                                                                 | •                                                                                  | •                                                                                   | •                                                                                   | •                                                                                   |
| Reverse Telnet                      | •                                                                                 | •                                                                                 | •                                                                                 | •                                                                                 | •                                                                                  | •                                                                                   | •                                                                                   | •                                                                                   |
| VPN                                 |                                                                                   |                                                                                   |                                                                                   | •                                                                                 | •                                                                                  | •                                                                                   | •                                                                                   | •                                                                                   |
| <b>Compliance</b>                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Industrial EMC Protection           |                                                                                   | •                                                                                 | •                                                                                 | •                                                                                 | •                                                                                  | •                                                                                   | •                                                                                   | •                                                                                   |
| CE/FCC                              | •                                                                                 | •                                                                                 | •                                                                                 | •                                                                                 | •                                                                                  | •                                                                                   | •                                                                                   | •                                                                                   |
| UL/EN/IEC(CB)60950-1 and/or 62368-1 |                                                                                   |                                                                                   |                                                                                   | •                                                                                 | •                                                                                  | •                                                                                   |                                                                                     |                                                                                     |
| EN60950-1 and/or EN62368            | •                                                                                 | •                                                                                 | •                                                                                 | •                                                                                 | •                                                                                  | •                                                                                   | •                                                                                   | •                                                                                   |
| UL61010-2-201                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | •                                                                                   |
| EN50155 / EN50121-4                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| IEC61850-3 / IEEE1613               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |

# Serial Device Servers

|                                     | Advanced                                                                          |                                                                                   |                                                                                   |                                                                                    | Enterprise                                                                          |                                                                                     | IP68                                                                                |
|-------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                     |  |  |  |  |  |  |  |
| <b>General Information</b>          |                                                                                   |                                                                                   |                                                                                   |                                                                                    | Coming soon                                                                         | Coming soon                                                                         |                                                                                     |
| Model Number                        | SE5908                                                                            | SE5916                                                                            | SE5908A                                                                           | SE5916A                                                                            | VSE5908/16                                                                          | VSE5932/48                                                                          | SE8502                                                                              |
| <b>Network Interfaces</b>           |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Total number of ports               | 2                                                                                 | 2                                                                                 | 6                                                                                 | 6                                                                                  | 2                                                                                   | 2                                                                                   | 1                                                                                   |
| Total Fast Ethernet                 | 2                                                                                 | 2                                                                                 | 6                                                                                 | 6                                                                                  | -                                                                                   | -                                                                                   | 1                                                                                   |
| 10/100 BaseT(X)                     | 2                                                                                 | 2                                                                                 | (6)                                                                               | (6)                                                                                | -                                                                                   | -                                                                                   | 1 (M12)                                                                             |
| 100 Base-X (SFP)                    | -                                                                                 | -                                                                                 | (6)                                                                               | (6)                                                                                | -                                                                                   | -                                                                                   | -                                                                                   |
| Total Gigabit                       | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                  | 2                                                                                   | 2                                                                                   | -                                                                                   |
| 10/100/1000 BaseT(X)                | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                  | (2)                                                                                 | (2)                                                                                 | -                                                                                   |
| 100/1000 Base-X SFP                 | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                  | (2)                                                                                 | (2)                                                                                 | -                                                                                   |
| Wi-Fi interface                     | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                  | -                                                                                   | -                                                                                   | -                                                                                   |
| 3G/4G interfaces                    | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                  | -                                                                                   | -                                                                                   | -                                                                                   |
| <b>Network Redundancy</b>           |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| RSTP redundant ports                | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                  | -                                                                                   | -                                                                                   | -                                                                                   |
| <b>Serial Ports</b>                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Number of ports                     | 8                                                                                 | 16                                                                                | 8                                                                                 | 16                                                                                 | 8/16                                                                                | 32/48                                                                               | 2 (M12)                                                                             |
| RS-232 RS-422 RS-485 full func.     | 8                                                                                 | 16                                                                                | 8                                                                                 | 16                                                                                 | -                                                                                   | -                                                                                   | 2 (M12)                                                                             |
| RS-232 only                         | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                  | 8/16                                                                                | 32/48                                                                               | -                                                                                   |
| Serial port Isolation               | 2.5kV (Optional)                                                                  | 2.5kV (Optional)                                                                  | 3kV (Optional)                                                                    | 3kV (Optional)                                                                     | -                                                                                   | -                                                                                   | -                                                                                   |
| Serial port connector               | RJ45                                                                              | RJ45                                                                              | DSub9/TB                                                                          | DSub9/TB                                                                           | RJ45                                                                                | RJ45                                                                                | M12                                                                                 |
| <b>Other interfaces</b>             |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Digital Inputs                      |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 2 (Optional)                                                                        |
| Digital Outputs                     |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 2 (Optional)                                                                        |
| Relay Output                        |                                                                                   |                                                                                   | 2                                                                                 | 2                                                                                  |                                                                                     |                                                                                     |                                                                                     |
| <b>Power Supply input</b>           |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Power Input                         | 24~48 VDC                                                                         | 24~48 VDC                                                                         | 24~48 VDC                                                                         | 24~48 VDC                                                                          |                                                                                     |                                                                                     | 9~48 VDC                                                                            |
| Power PoE 802.3af (PD)              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| AC power input                      | 100~240VAC                                                                        | 100~240VAC                                                                        | 100~240VAC                                                                        | 100~240VAC                                                                         | 100~240VAC                                                                          | 100~240VAC                                                                          |                                                                                     |
| High Voltage DC power input         |                                                                                   |                                                                                   | 100~370VDC                                                                        | 100~370VDC                                                                         | 100~370VDC                                                                          | 100~370VDC                                                                          |                                                                                     |
| Power Redundancy                    |                                                                                   |                                                                                   | •                                                                                 | •                                                                                  | •                                                                                   | •                                                                                   |                                                                                     |
| <b>Mechanical</b>                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Installation                        | Rack-mount                                                                        | Rack-mount                                                                        | Rack-mount                                                                        | Rack-mount                                                                         | Rack-mount                                                                          | Rack-mount                                                                          | Field-Mount                                                                         |
| Ingress Protection                  | IP30                                                                              | IP30                                                                              | IP30                                                                              | IP30                                                                               | IP30                                                                                | IP30                                                                                | IP68                                                                                |
| Dimensions (L x H x D) in mm        | 440 x 44 x 200                                                                    | 440 x 44 x 200                                                                    | 440 x 44 x 309                                                                    | 440 x 44 x 309                                                                     | 440 x 44 x 309                                                                      | 440 x 44 x 309                                                                      | 80 x 145 x 24                                                                       |
| <b>Supported Temperatures</b>       |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Operations Temperature              | -20/70° C                                                                         | -20/70° C                                                                         | -40/85° C                                                                         | -40/85° C                                                                          | 5/50° C                                                                             | 5/50° C                                                                             | -40~75° C                                                                           |
| Storage Temperature                 | -40~85° C                                                                         | -40~85° C                                                                         | -40~85° C                                                                         | -40~85° C                                                                          | -30~60° C                                                                           | -30~60° C                                                                           | -40~85° C                                                                           |
| <b>Serial Server</b>                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| TCP Client (max connections)        | 2/VCOM                                                                            | 2/VCOM                                                                            | 2/VCOM                                                                            | 2/VCOM                                                                             | 2/VCOM                                                                              | 2/VCOM                                                                              | 2/VCOM                                                                              |
| TCP Server (max connections)        | 4/VCOM                                                                            | 4/VCOM                                                                            | 4/VCOM                                                                            | 4/VCOM                                                                             | 4/VCOM                                                                              | 4/VCOM                                                                              | 4/VCOM                                                                              |
| UDP (ranges)                        | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                  | 4                                                                                   | 4                                                                                   | 8                                                                                   |
| VirtualCOM                          | •                                                                                 | •                                                                                 | •                                                                                 | •                                                                                  |                                                                                     |                                                                                     | •                                                                                   |
| Reverse Telnet                      | •                                                                                 | •                                                                                 | •                                                                                 | •                                                                                  | advanced                                                                            | advanced                                                                            | •                                                                                   |
| VPN                                 | •                                                                                 | •                                                                                 | •                                                                                 | •                                                                                  |                                                                                     |                                                                                     | •                                                                                   |
| <b>Compliance</b>                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Industrial EMC Protection           | •                                                                                 | •                                                                                 | •                                                                                 | •                                                                                  | •                                                                                   | •                                                                                   | •                                                                                   |
| CE/FCC                              | •                                                                                 | •                                                                                 | •                                                                                 | •                                                                                  | •                                                                                   | •                                                                                   | •                                                                                   |
| UL/EN/IEC(CB)60950-1 and/or 62368-1 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| EN60950-1 and/or EN62368            | •                                                                                 | •                                                                                 | •                                                                                 | •                                                                                  | •                                                                                   | •                                                                                   | •                                                                                   |
| UL61010-2-201                       |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| EN50155 / EN50121-4                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | •                                                                                   |
| IEC61850-3 / IEC61850-4             |                                                                                   |                                                                                   | •                                                                                 | •                                                                                  | •                                                                                   | •                                                                                   |                                                                                     |