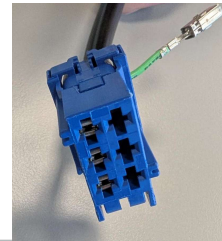
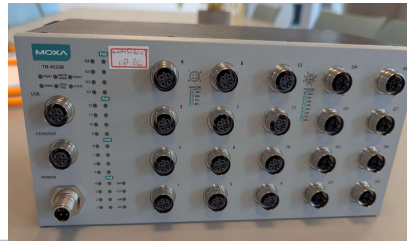




ITxPT Module Labeling Report

| | |
|-------------------------|------------------------------------------|
| REPORT ID | 20250226-0233 |
| DATE | 26/06/2025 |
| COMPANY | MOXA |
| TESTER | Henrik Simpanen |
| SPECIFICATION | S01 - S02P00 to S02P01 (Sequoia Release) |
| TOOLS USED FOR THE TEST | ITxPT Laboratory |



Module configuration tested by ITxPT laboratory

| Manufacturer | Model | Hardware version | Software version | Unique Identifier |
|--------------|-----------------------|------------------|------------------|-------------------|
| MOXA | TN-4520B-12P-4G-4GP-T | v0.0.0 | v2.0 | sn.202405020007 |

Hardware interfaces

| Interface name | Provided status | Implementation level |
|-------------------------|-----------------|---------------------------------------|
| Power supply | ✓ | Permanent, Ignition, SLEEP management |
| Ethernet | ✓ | Native, 12x M12-D and 8x M12-X |
| FMS | N/A | |
| Wireless communications | N/A | |
| Audio | N/A | |
| Auxiliary | N/A | |

Implemented services

| Service | Operation | Provided status | Provided type | Consumed status | Consumed type |
|------------------|------------------------------|-----------------|-----------------|-----------------|--------------------------------|
| Module Inventory | | ✓ | itxpt_socket | N/A | itxpt_socket and/or itxpt_http |
| Time | | N/A | sntp | N/A | sntp |
| GNSS Location | | N/A | itxpt_multicast | N/A | itxpt_multicast |
| FMS to IP | Provision | N/A | itxpt_multicast | N/A | itxpt_multicast |
| | Configuration | N/A | itxpt_http | N/A | itxpt_http |
| VEHICLEtoIP | | N/A | itxpt_multicast | N/A | itxpt_multicast |
| AVMS | Run Monitoring | N/A | itxpt_http | N/A | itxpt_http |
| | Planned Pattern | N/A | | N/A | |
| | Pattern Monitoring | N/A | | N/A | |
| | Vehicle Monitoring | N/A | | N/A | |
| | Journey Monitoring | N/A | | N/A | |
| | General Message | N/A | | N/A | |
| | Connection Monitoring | N/A | | N/A | |
| APC | Passenger door count | N/A | itxpt_http | N/A | itxpt_http |
| | Passenger vehicle count | N/A | | N/A | |
| MADT | MADT information | N/A | itxpt_socket | N/A | itxpt_socket |
| | Play a sound | N/A | | N/A | |
| | Read settings | N/A | | N/A | |
| | Write settings | N/A | | N/A | |
| | Stop the MADT Service | N/A | | N/A | |
| | Restart the MADT Service | N/A | | N/A | |
| | Retrieve MTS characteristics | N/A | | N/A | |
| | Create a Web tab | N/A | | N/A | |
| | Create a VNC tab | N/A | | N/A | |
| | Create a shortcut | N/A | | N/A | |
| | Navigate to given URI | N/A | | N/A | |
| | Blink a tab | N/A | | N/A | |
| | Activate a tab | N/A | | N/A | |
| | Remove a tab | N/A | | N/A | |
| | Remove a shortcut | N/A | | N/A | |
| | I am alive | N/A | | N/A | |
| | Get tabs mapping | N/A | | N/A | |
| | Get shortcuts | N/A | | N/A | |
| MQTT | | N/A | mqtt | N/A | mqtt |



DISCLAIMER

Module manufacturer shall declare any change impacting the result of one or several tests for each module configuration using the "declaration of change" file available on ITxPT documentation center.
The consumption status is based primarily on the module manufacturer's declaration, since laboratory tests can only partially assess service consumption. The manufacturer hereby guarantees that its module is fully capable of consuming, i.e., subscribing to, receiving and processing data from services provided by

VARIANTS OF LABEL ID

20250226-0233

DISCLAIMER

The undersigned, representing the module manufacturer, hereby declares and guarantees that all ITxPT-related interfaces or services, whether optional or mandatory, which are compliant with the tested module configuration, are implemented identically across all configuration variants of the tested module. Only the same or simpler hardware configuration variants may be listed, the firmware must remain the same. Each variant must be provided with the description of the hardware differences compared to the reference model. Wildcards are not allowed in the variant names.

Signed: ____Hugo Chan_____

Name: ____MOXA

Date: ____03.07.2025_____

Company Stamp: 

| Manufacturer | Tested model name | Short description of the tested hardware | Hardware version | Software / Firmware version | Specification Package | Provision (S02P01-Inventory, S02P02-Time, ...) | Consumption (S02P01-Inventory, S02P02-Time, ...) | Power supply (Permanent Ignition Main switch Full power SLEEP mode POE) | Ethernet implementation | FMS | Wireless communication s (GSM GPS WLAN) | Audio | Auxiliary (Low battery , Odometer , Doors , AnyDoorOpen , Awake request , Stop request , Full power) |
|--------------|-----------------------|-------------------------------------------------------------------------------------------|------------------|-----------------------------|-----------------------|------------------------------------------------|--------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------|-----|---------------------------------------------|-------|------------------------------------------------------------------------------------------------------|
| MOXA | TN-4520B-12P-4G-4GP-T | M12 managed Ethernet switches with 20 ports. 12 FE ports, 4 GbE ports and 4 GbE PoE ports | v1.0.0 | v2.0 | Sequoia | S01P01-Inventory | N/A | Permanent, Ignition, SLEEP management | Native, 12x M12-D and 8x M12-X | N/A | N/A | N/A | N/A |


| Manufacturer | Variant full name (wildcards are not accepted) | Short description of the differences with the tested model (same or simpler hardware architecture) | Hardware version | Software / Firmware version | Specification Package | Provision | Consumption | Power supply | Ethernet implementation | FMS | Wireless communication s | Audio | Auxiliary |
|--------------|------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------|-----------------------------|-----------------------|------------------|-------------|---------------------------------------|--------------------------------|-----|--------------------------|-------|-----------|
| MOXA | TN-4508B-CT-T | 8 ports, 8 FE ports | v1.0.0 | v2.0 | Sequoia | S01P01-Inventory | N/A | Permanent, Ignition, SLEEP management | Native, 8x M12-D | N/A | N/A | N/A | N/A |
| MOXA | TN-4512B-CT-T | 12 ports, 12 FE ports | v1.0.0 | v2.0 | Sequoia | S01P01-Inventory | N/A | Permanent, Ignition, SLEEP management | Native, 12x M12-D | N/A | N/A | N/A | N/A |
| MOXA | TN-4512B-8P-4G-CT-T | 12 ports, 8 FE ports, 4 GbE ports | v1.0.0 | v2.0 | Sequoia | S01P01-Inventory | N/A | Permanent, Ignition, SLEEP management | Native, 8x M12-D and 4x M12-X | N/A | N/A | N/A | N/A |
| MOXA | TN-4516B-CT-T | 16 ports, 16 FE ports | v1.0.0 | v2.0 | Sequoia | S01P01-Inventory | N/A | Permanent, Ignition, SLEEP management | Native, 16x M12-D | N/A | N/A | N/A | N/A |
| MOXA | TN-4516B-8G-CT-T | 16 ports, 8 FE ports, 8 GbE ports | v1.0.0 | v2.0 | Sequoia | S01P01-Inventory | N/A | Permanent, Ignition, SLEEP management | Native, 8x M12-D and 8x M12-X | N/A | N/A | N/A | N/A |
| MOXA | TN-4516B-8P-4G-4GP-CT-T | 16 ports, 8 FE ports, 4 GbE ports, 4 GbE PoE ports | v1.0.0 | v2.0 | Sequoia | S01P01-Inventory | N/A | Permanent, Ignition, SLEEP management | Native, 8x M12-D and 8x M12-X | N/A | N/A | N/A | N/A |
| MOXA | TN-4516B-8P-4GP-4GBP-CT-T | 16 ports, 8 FE ports, 4 GbE ports, 4 GbE PoE bypass ports | v1.0.0 | v2.0 | Sequoia | S01P01-Inventory | N/A | Permanent, Ignition, SLEEP management | Native, 8x M12-D and 8x M12-X | N/A | N/A | N/A | N/A |
| MOXA | TN-4520B-12P-4G-4GP-CT-T | 20 ports, 12 FE ports, 4 GbE ports, 4 GbE PoE ports | v1.0.0 | v2.0 | Sequoia | S01P01-Inventory | N/A | Permanent, Ignition, SLEEP management | Native, 12x M12-D and 8x M12-X | N/A | N/A | N/A | N/A |
| MOXA | TN-4520B-12P-4GP-4GBP-CT-T | 20 ports, 12 FE ports, 4 GbE ports, 4 GbE PoE bypass ports | v1.0.0 | v2.0 | Sequoia | S01P01-Inventory | N/A | Permanent, Ignition, SLEEP management | Native, 12x M12-D and 8x M12-X | N/A | N/A | N/A | N/A |
| MOXA | TN-4528B-20P-4G-4GP-CT-T | 28 ports, 20 FE ports, 4 GbE ports, 4 GbE PoE ports | v1.0.0 | v2.0 | Sequoia | S01P01-Inventory | N/A | Permanent, Ignition, SLEEP management | Native, 20x M12-D and 8x M12-X | N/A | N/A | N/A | N/A |
| MOXA | TN-4528B-20P-4GP-4GBP-CT-T | 28 ports, 20 FE ports, 4 GbE ports, 4 GbE PoE bypass ports | v1.0.0 | v2.0 | Sequoia | S01P01-Inventory | N/A | Permanent, Ignition, SLEEP management | Native, 20x M12-D and 8x M12-X | N/A | N/A | N/A | N/A |
| MOXA | TN-4512B-4G-8GP-CT-T | 12 ports, 4 GbE ports, 8 GbE PoE ports | v1.0.0 | v2.0 | Sequoia | S01P01-Inventory | N/A | Permanent, Ignition, SLEEP management | Native, 4x M12-D and 8x M12-X | N/A | N/A | N/A | N/A |

VARIANTS OF LABEL ID20250226-0233

DISCLAIMER

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Signed: ____Hugo Chan_____
Date: ____03.07.2025_____

Name: ____MOXA_____
Company Stamp: ____

| Manufacturer | Tested model name | Short description of the tested hardware | Hardware version | Software / Firmware version | Specification Package | Provision (S02P01-Inventory, S02P02-Time, ...) | Consumption (S02P01-Inventory, S02P02-Time, ...) | Power supply (Permanent Ignition Main switch Full power SLEEP mode POE) | Ethernet implementation | FMS | Wireless communications (GSM GPS WLAN) | Audio | Auxiliary (Low battery , Odometer , Doors , AnyDoorOpen , Awake request , Stop request , Full power) |
|--------------|-----------------------|-------------------------------------------------------------------------------------------|------------------|-----------------------------|-----------------------|------------------------------------------------|--------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------|-----|--------------------------------------------|-------|------------------------------------------------------------------------------------------------------|
| MOXA | TN-4520B-12P-4G-4GP-T | M12 managed Ethernet switches with 20 ports. 12 FE ports, 4 GbE ports and 4 GbE PoE ports | v1.0.0 | v2.0 | Sequoia | S01P01-Inventory | N/A | Permanent, Ignition, SLEEP management | Native, 12x M12-D and 8x M12-X | N/A | N/A | N/A | N/A |

| Manufacturer | Variant full name (wildcards are not accepted) | Short description of the differences with the tested model (same or simpler hardware architecture) | Hardware version | Software / Firmware version | Specification Package | Provision | Consumption | Power supply | Ethernet implementation | FMS | Wireless communications | Audio | Auxiliary |
|--------------|------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------|-----------------------------|-----------------------|------------------|-------------|---------------------------------------|--------------------------------|-----|-------------------------|-------|-----------|
| MOXA | TN-4516B-4G-12GP-CT-T | 16 ports, 4 GbE ports, 12 GbE PoE ports | v1.0.0 | v2.0 | Sequoia | S01P01-Inventory | N/A | Permanent, Ignition, SLEEP management | Native, 4x M12-D and 12x M12-X | N/A | N/A | N/A | N/A |
| MOXA | TN-4516B-12GP-4GBP-CT-T | 16 ports, 12 GbE PoE ports, 4 GbE PoE bypass ports | v1.0.0 | v2.0 | Sequoia | S01P01-Inventory | N/A | Permanent, Ignition, SLEEP management | Native, 12x M12-D and 4x M12-X | N/A | N/A | N/A | N/A |
| MOXA | TN-4524B-16P-4G-4GP-CT-T | 24 ports, 16 FE ports, 4 GbE ports, 4 GbE PoE ports | v1.0.0 | v2.0 | Sequoia | S01P01-Inventory | N/A | Permanent, Ignition, SLEEP management | Native, 16x M12-D and 8x M12-X | N/A | N/A | N/A | N/A |
| MOXA | TN-4524B-16P-4GP-4GBP-CT-T | 24 ports, 16 FE ports, 4 GbE PoE ports, 4 GbE PoE bypass ports | v1.0.0 | v2.0 | Sequoia | S01P01-Inventory | N/A | Permanent, Ignition, SLEEP management | Native, 16x M12-D and 8x M12-X | N/A | N/A | N/A | N/A |

7/3/2025

Variants

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