Whitelist

All connections are initiated from edge device to the internet on default TCP/443 HTTPS protocol. There is no port to open from internet to the edge device.

URL/IP	PORT	INFORMATION
*.necton.digital	TCP/443	Necton Web portal and services
aetheracrus.azurecr.io	TCP/443	Necton Edge PC Modules repository browse
aetheracrus.eastus.data.azurecr.io	TCP/443	Necton Edge PC Modules repository download
global.azure-devices-provisioning.net	TCP/443	Necton Edge PC Enrollment services (provided by Microsoft Azure)
mcr.microsoft.com	TCP/443	Microsoft Azure IOT Modules Repository
packages.microsoft.com	TCP/443	Microsoft Azure IOT Packages
ptd-can-aether-shared-1-prod-dps.azure-devices-provisioning.net	TCP/443	Necton Edge PC Provisioning/Enrollment
iothub-connectoem-ptsa-instance1.azure-devices.net	TCP/443	Necton Edge PC IoT Data stream
PTAPC-EdgePCVault.vault.azure.net	TCP/443	Necton Edge PC key vault
ptapcblob.blob.core.windows.net	TCP/443	Necton Enrollment File Deposit
archive.ubuntu.com	TCP/80	Necton Edge PC OS Updates (Ubuntu)

Data collected

Below in the table all the data points that are collected by the solution to generate everything Necton™ has to offer.

TAG NAME	DESCRIPTION	VALUES	HOW IT IS USED
EquipmentSerialNumber	Unique serial number for equipment identification.	Numerical value.	Match equipment and configuration.
TagTemplateVersion	Version of the tag template table in the PLC.	Numerical value.	Match versioning of the tag standard in the equipment and the data logging system.
CurrentProduct	Current product name of the product being packaged.	The name of the PLC product that is active.	Attribute to add context to the production counters, alarms and Equipment Status.
CurrentSku	Current product SKU of the product being packaged.	The name of the PLC SKU that is active.	Attribute to add context to the production counters, alarms and Equipment Status.
CurrentRecipe	Current recipe name (PLC recipe). The current recipe is the equipment setup name in use. A setup is a set of customizable parameters to configure the equipment.	The name of the PLC recipe that is active.	Add context to the production counters, alarms and Equipment Status. .
CurrentState	Equipment status as stated in PackML.	0= "Undefined",1= "Clearing", 2= "Stopped", 3= "Starting", 4= "Idle", 5= " Suspended", 6 = "Execute", 7= "Stopping", 8= "Aborting", 9= "Aborted", 10= "Holding", 11= "Held", 12= "UnHolding", 13= "Suspending", 14= "Unsuspending", 15= "Resetting", 16= "Completing" , 17= "Complete"	Monitor packML statuses relative to equipment status. Some of these statuses will not be populated in the equipment. This is equipment dependent.
Alarms	Permit up to 32 sets of 32 alarms for a total of 1024 alarms. A list	Every alarm is linked to a bit. 32 bits are available per set. There is a possibility of 32 DINT. Every bit has a value of 0 or 1. A	Build a complete view of every alarm activated in the equipment.

	enables to match the tag values to alarm a description.	list enables to match the tag values to an alarm description.	
ProductionInGood	Machine good production input counts	It goes up one unit at the time. Incremental counter that loops back after the limit.	Counts of good inputs. Example: • Bagger good bags on spout • Palletizer good units palletized
ProductionInBad	Machine bad production intput counts	It goes up one unit at the time. Incremental counter that loops back after the limit.	Counts of bad inputs. Example: • Bagger bag missed on spout • Palletizer units rejected (leak, metal, weight, etc.)
ProductionOutGood	Machine good production output counts	It goes up one unit at the time. Incremental counter that loops back after the limit.	Counts of good outputs. Example: • Bagger bags filled • Palletizer pallet completed
ProductionOutBad	Machine bad production output counts	It goes up one unit at the time. Incremental counter that loops back after the limit. .	Counts of bad outputs. Example: • Bagger units rejected (leak, metal, weight, etc.) • Palletizer uncompleted load
MaterialReady	The main consumable required for the equipment to perform his transformation. For a bagger, it is a bag and for a palletizer, pallets.	0= "Not Ready" 1= "Ready" for each bit. Bits description in a following section	Monitor if missing consumables are an issue to production.
Running	The equipment is packaging. In auto.	0= "Not Running" 1= "Running"	Monitor Uptime and Downtime

Starved	The equipment is starved of product. It can't package because the product input is not available.	0= "Not Starved" 1= "Starved"	Information concerning the availability of product upstream the equipment.
Blocked	The equipment is blocked. It can't package the product because the exit of the equipment is blocked.	0= "Not Blocked" 1= "Blocked"	Information concerning the availability of moving to product downstream the equipment.
RobotAlarm	There is at least one robot controller in alarm.	0= "No Robots controller in alarm" 1= "A robot controller is in alarm"	Monitor if a robot is in alarm.
EquipmentAlarm	There is at least one alarm active in the equipment.	0= "No alarm active" 1= "At least one alarm is active"	Monitor if the equipment is in alarm.
Heartbeat	Heartbeat between PLC and edge PC	DINT that increases each scan and loop back after the limit.	Monitor live connection