



Welcome

Novedades 2021

Controladores

Antonio Gordillo / 7 de Mayo 2021 / IMA Marketing

New 2021 **Agenda** Controladores / I/O's / Lighting and Signaling

➤ **Controllers**

- PLCnext Technology
- SPLC 1000
- AXC F XT PB
- AXC F XT EXP
- EPC1502 EPC 1522
- Device and Patch Management concept
- PLCnext Controller IEC 62433 status
- AXC F XT ML 1000
- Proficloud and other CLOUDS connectivity
- Redundancy AXC F 2152 and RFC 4072R



PLCnext Technology

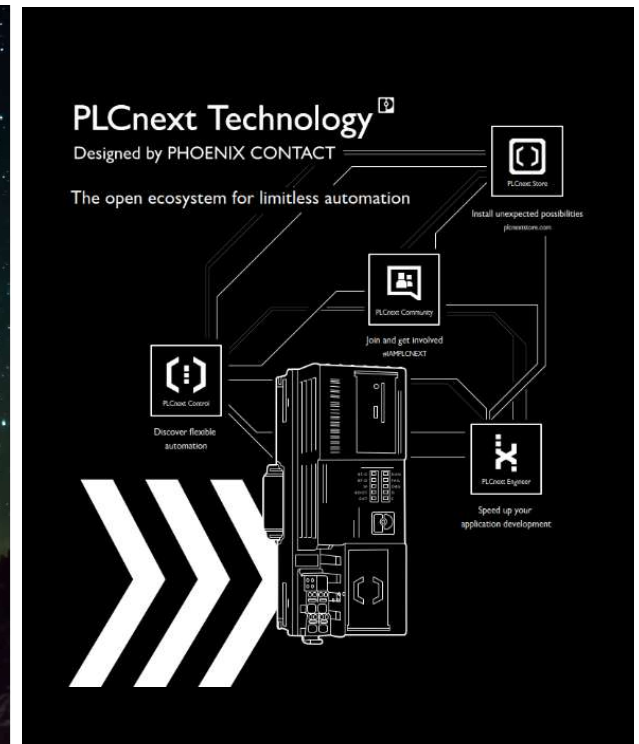
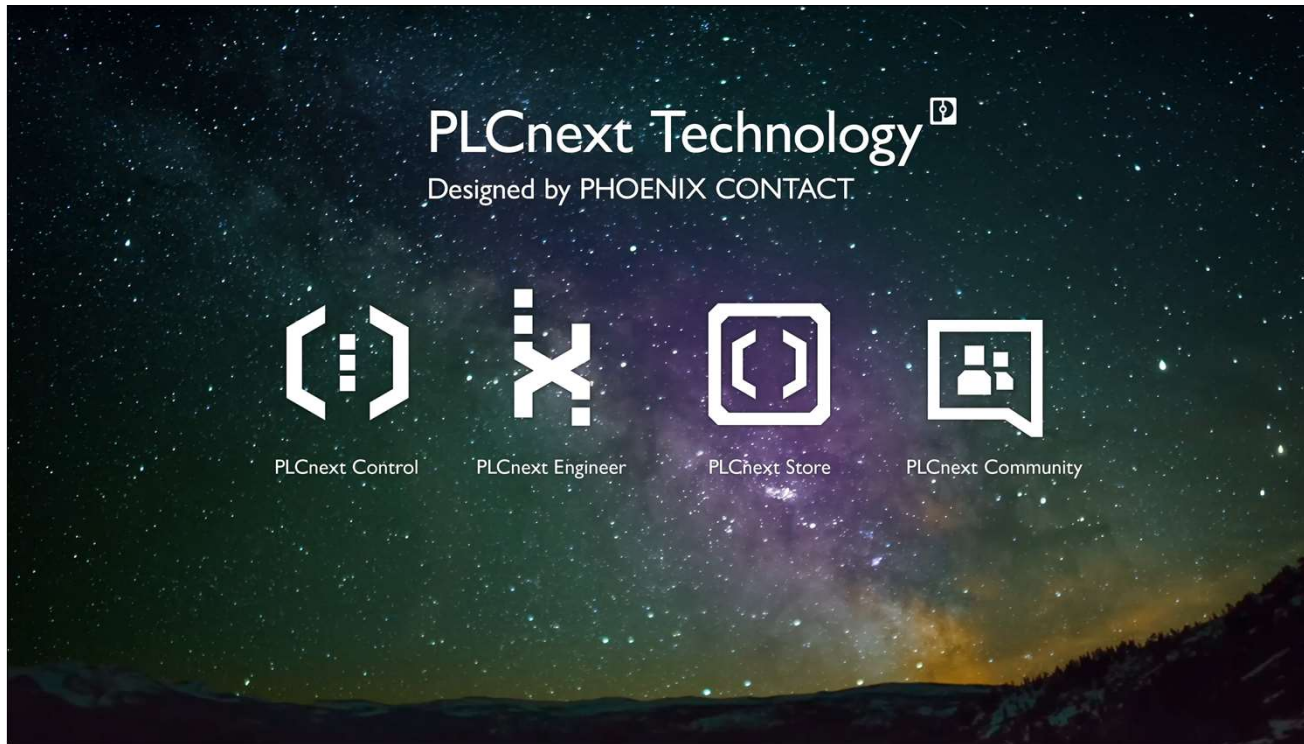
Agenda

- PLCnext Ecosystem
 - PLCnext Controls
 - New: EPC 15x2
 - PLCnext Extensions
 - New: SPLC 1000
 - New: Profibus Master
 - New: Machine Learning module
-



PLCnext Technology Ecosystem

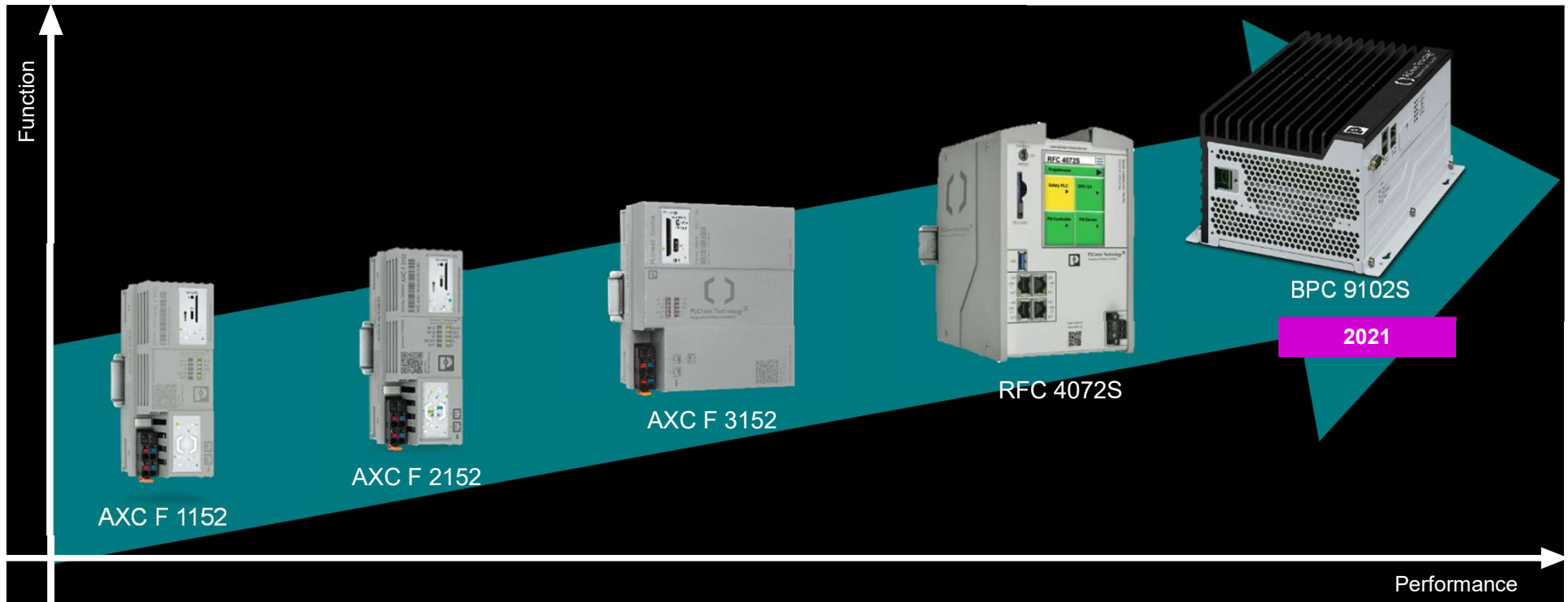
PLCnext Technology



PLCnext Ecosystem – PLCnext Control

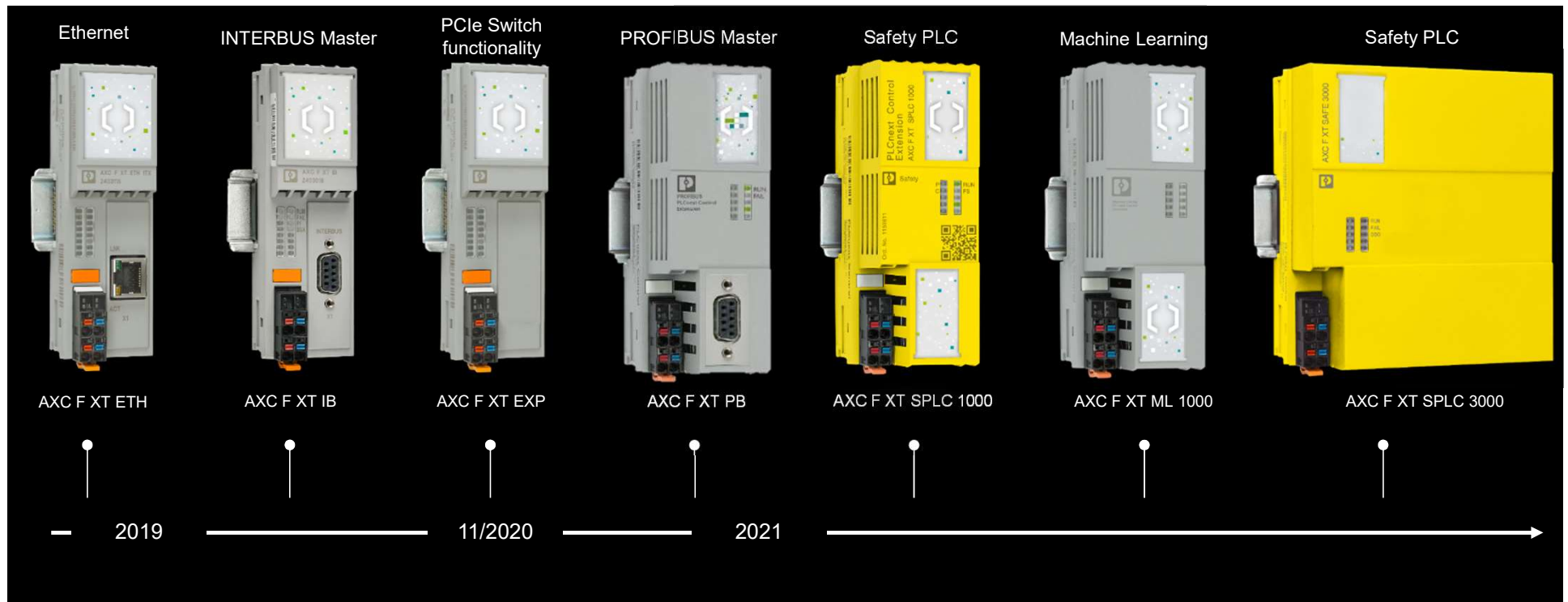
PLCnext Control Portfolio Overview

PLCnext Technology[®]
Designed by PHOENIX CONTACT



PLCnext Ecosystem – PLCnext Control


Portfolio PLCnext Control Extensions



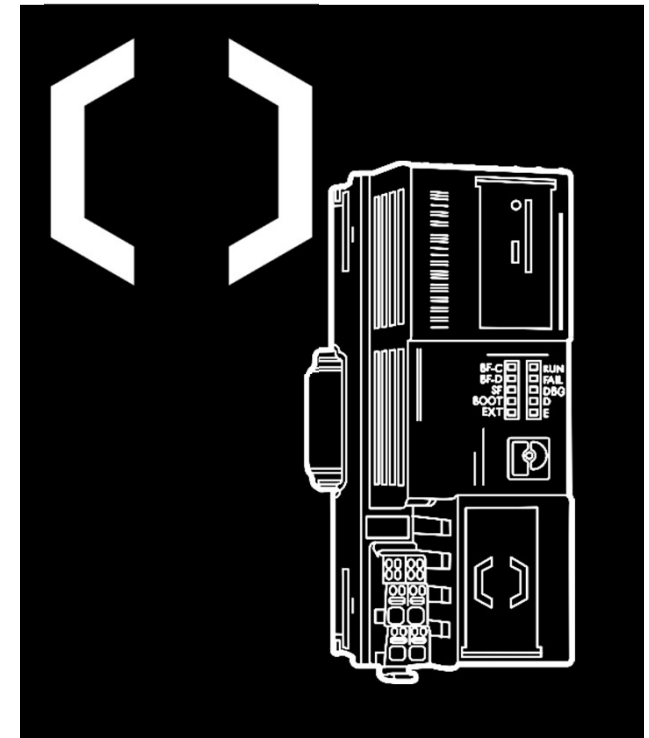
PLCnext Control

PLCnext Technology 
Designed by PHOENIX CONTACT

PLCnext Extension AXC F XT SPLC 1000



- Profisafe Extension Specification 2.6.1
- SIL 3 / PL e
- 2x Cortex M4
- Simultaneous operating as F-Host and F-Device
- 45 mm width (AXC F 2152 housing)
- Supports up to 32 Profisafe devices
- Reloadable C-Functions
- Temperature range: -25°C up to 60°C
- Approvals
 - UL (Hazloc), CUL
 - DNV/GL, LR, BV, ABS, ...
 - IEC Ex, ATEX



Coming Soon

Modular Safety Solutions - From E-stops to PROFIsafe controllers

SPLC1000 PROFIsafe extension for PLCnext Controls



MUCH MORE
THAN JUST A GREAT VISION
enhanced automation today



Modular Safety Solutions - From E-stops to PROFIsafe controllers

SPLC1000 PROFIsafe extension for PLCnext Controls

- PROFIsafe Portfolio of Safety PLCs
 - AXC F XT SPLC 1000
 - Product Combinations with PLCnext Axiocontrol
 - Competition
 - Use cases and applications
 - Live Demo with Engineering
-



Modular Safety Solutions - From E-stops to PROFIsafe controllers

PROFIsafe Portfolio of SPLCs

RFC 4072S – Highperformance Solution

- Highperformance for PLCnext and Safety
 - Intel i5 Skylake Dual Core 2 x 2.4 MHz
 - ARM A8/A9 for Safety with 600/800 MHz
 - 300 F-Devices









Modular Safety Solutions - From E-stops to PROFIsafe controllers

SPLC 1000



AXC F XT SPLC 1000

Core	# of Profisafe devices	Temperature
		
2 x Cortex M4	32	-25°C - 60°C
Width	Approvals	C Functions
		
45mm	UL, CUL, etc	Reloadable

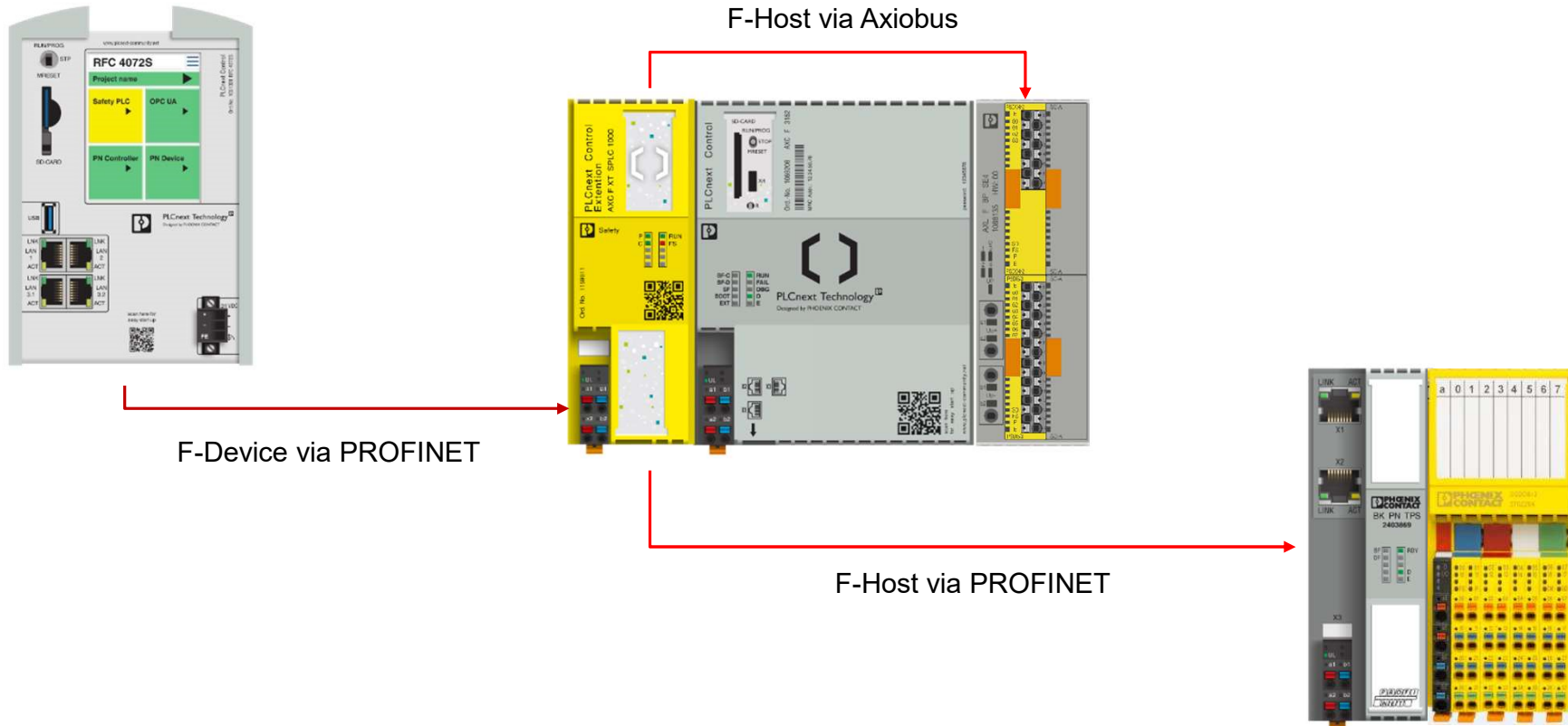
Modular Safety Solutions - From E-stops to PROFI-safe controllers

Possibilities of left sided combination with AXC F 2152 & 3152



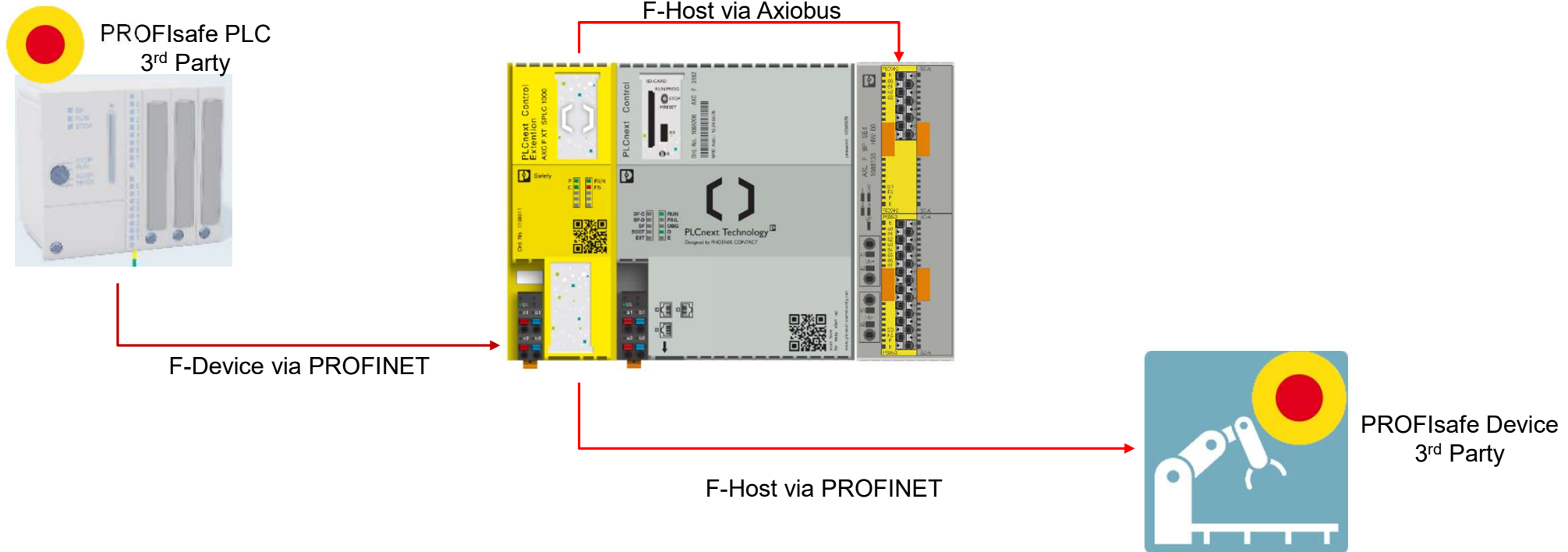
Modular Safety Solutions - From E-stops to PROFI-safe controllers

Cascaded PROFI-safe Controls



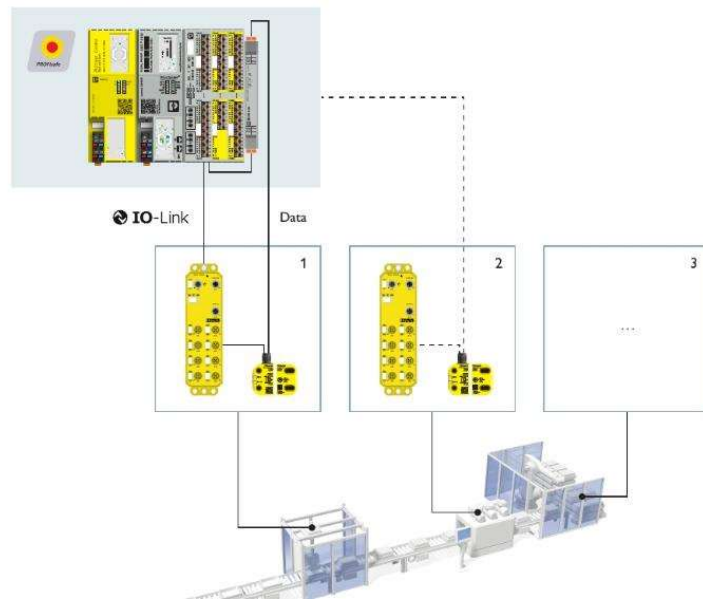
Modular Safety Solutions - From E-stops to PROFI-safe controllers

Cascaded PROFI-safe Controls



Modular Safety Solutions - From E-stops to PROFI-safe controllers

Applications



Modular Design



Compact Design

Modular Safety Solutions - From E-stops to PROFI-safe controllers

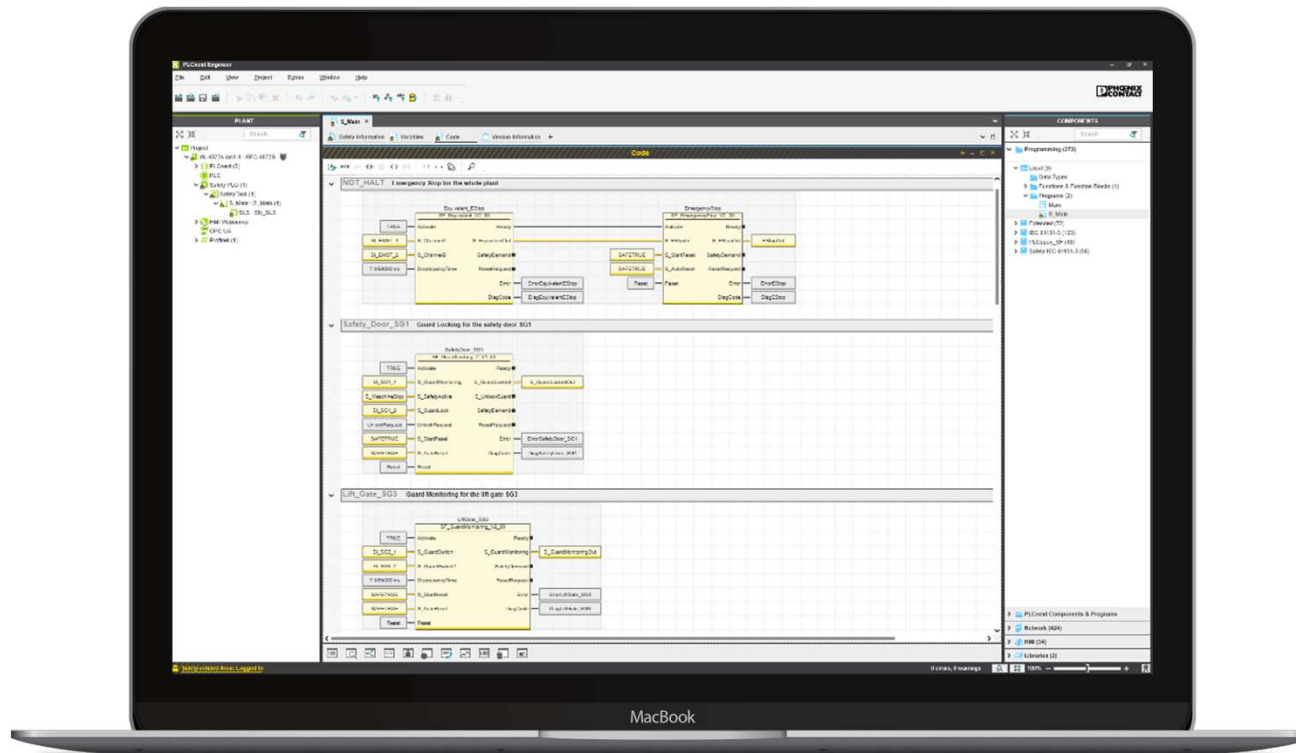
AXC F XT SPLC 1000 Release Roadmap



Release date 30th September 2021

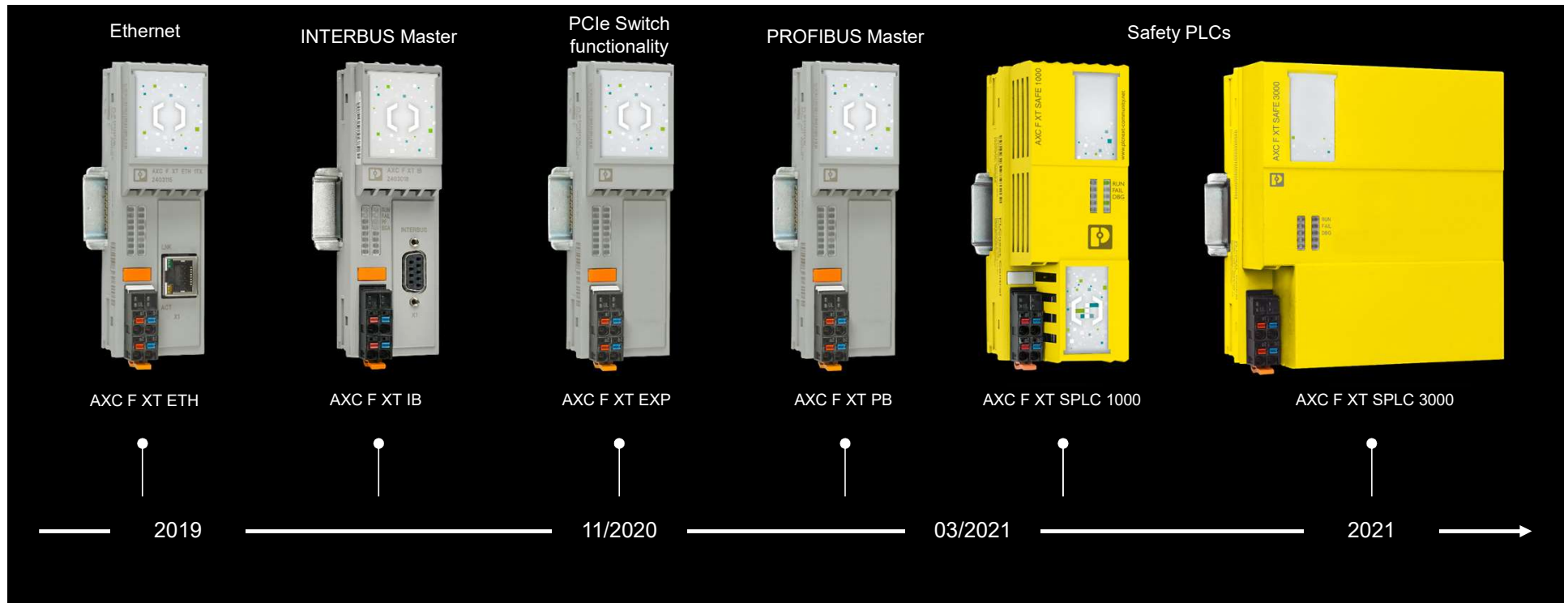
Modular Safety Solutions - From E-stops to PROFIsafe controllers

Integration of standard and safety programming in PLCnext Engineer



PLCnext Ecosystem – PLCnext Control

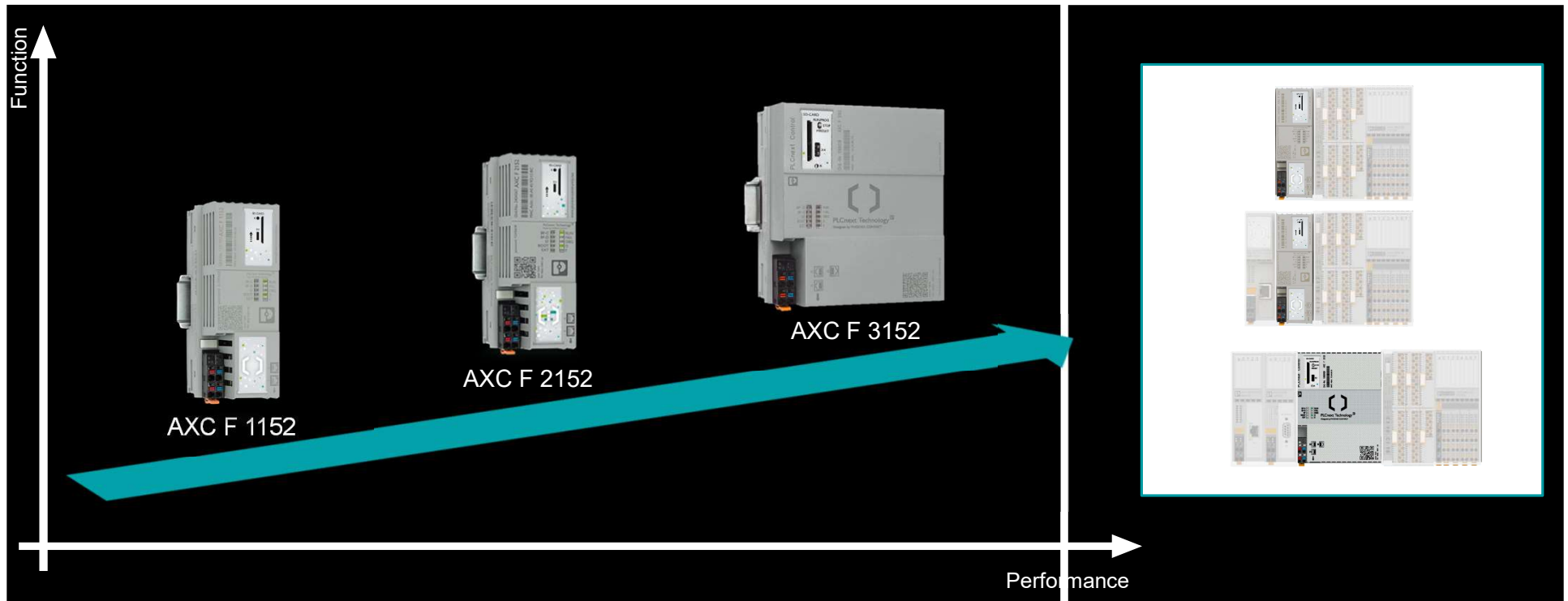
Portfolio PLCnext Control Extensions



PLCnext Control

PLCnext Technology 
Designed by PHOENIX CONTACT

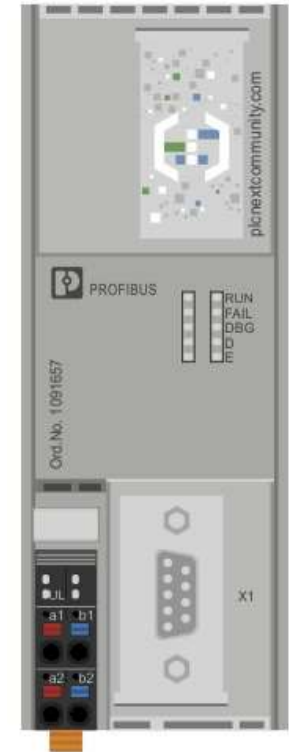
PLCnext Control for flexible automation with modular hardware platform



Extension Profibus

AXC F XT PB

The AXC F XT PB module is a Profibus master, which exchanges data with up to 125 Profibus participants, both cyclically (DP V0) and acyclically (DP V1).



AXC F XT PB

PLCnext Control

PLCnext Extension AXC F XT PB



PLCnext Technology 
Designed by PHOENIX CONTACT



Description

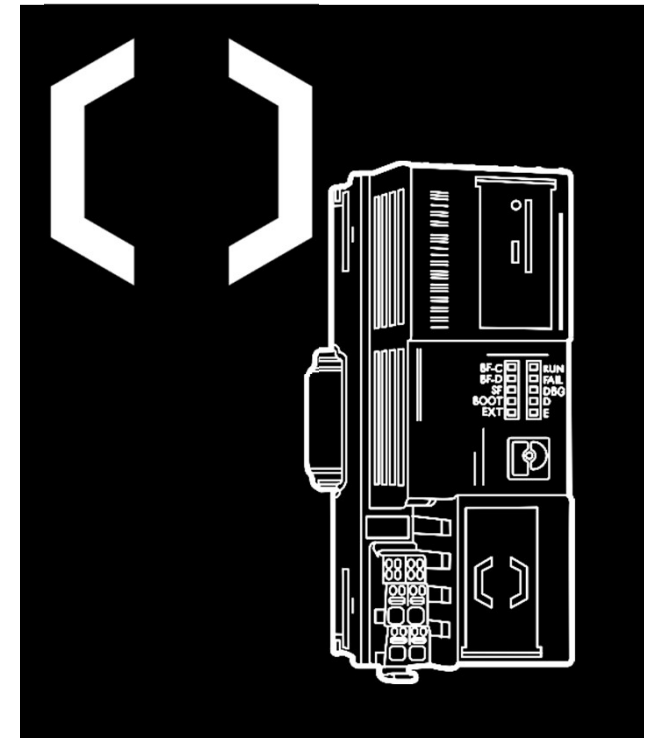
The AXC F XT PB function module realizes a PROFIBUS Master functionality for the PLCnext Controller AXC F 2152 and AXC F 3152. The AXC F XT PB will line up left side of the controller.

Benefits

- Full supported PROFIBUS Master
- Protocols DP-V0 and DP-V1
- Up to 125 supported devices
- Easy handling

Application fields

- Wind industry
- Infrastructure




Coming Soon

PLCnext Control

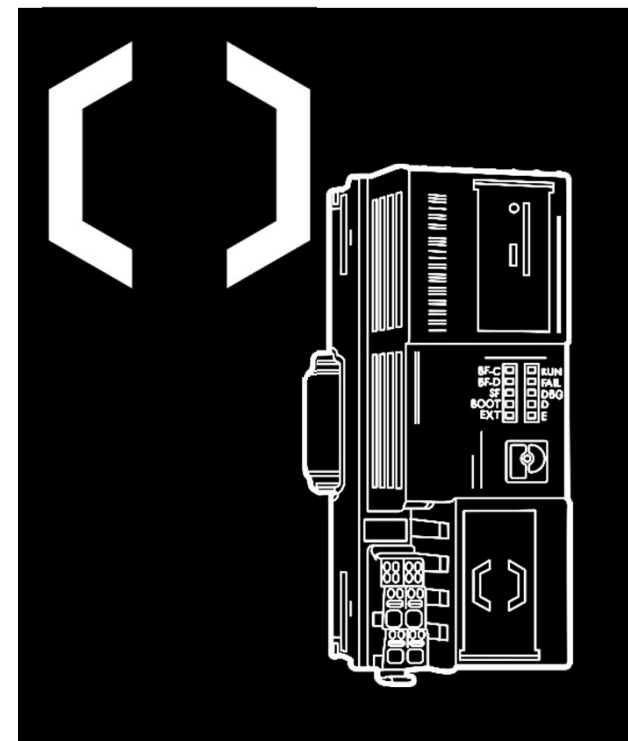
PLCnext Extension AXC F XT PB



PLCnext Technology 
Designed by PHOENIX CONTACT

A photograph of the PLCnext Extension AXC F XT PB device. It is a grey, rack-mountable unit with a digital display on the front showing a colorful geometric pattern. Below the display are status LEDs labeled "RUN" and "FAIL". At the bottom, there is a 9-pin D-sub connector and a terminal block with red, blue, and black wires.

- Universal PROFIBUS DP Master
- Protocols DP-V0 / DP-V1
- RS485 standard with 9Pin D-Sub Konnektor
- Process data max. 488 Bytes (244 Bytes IN / 244 Bytes OUT)
- Baudrate: 9,6 KBits/s ... 12MBits/s
- Amount of devices max. 125
- Operating temperature: -25 °C up to +60 °C
- Maritime Certifications: DNV/GL / Lloyds Register / Bureau Veritas / American Bureau of Shipping / Rina / Korean Register
- EX certifications: IEC Ex / ATEX
- UL certifications: UL (Hazloc) / CUL



Countless possibilities in hardware variance

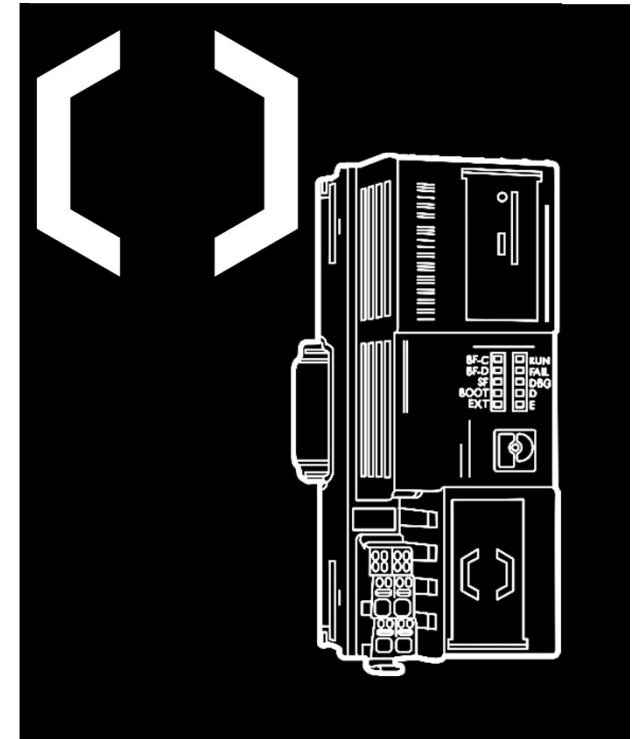
PLCnext Control

PLCnext Technology[®]
Designed by PHOENIX CONTACT

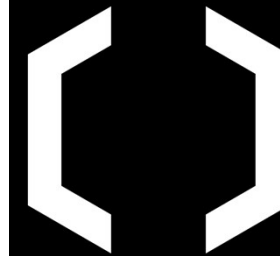
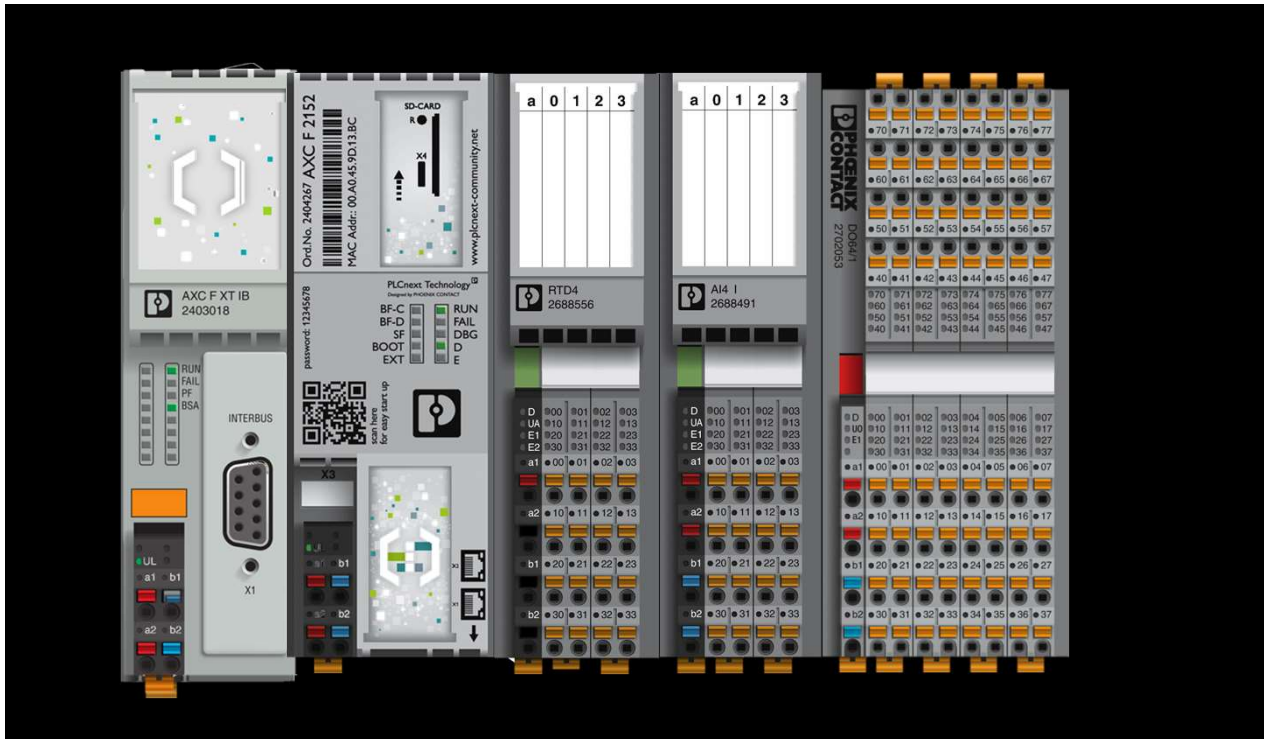
new

PLCnext Control Extension

Control functionality can
be easily extended with
left-handed modules



Left-hand side extension possibilities



- Modular expandability of the controller through left-sided expansion modules on the PCI express interface via a corresponding bus socket
- Unlimited expansion possibilities

Left Modules from PLCnext Controllers

AXC F XT EXP



3 2 1



AXC BS L 2 - 1064312



AXC F XT EXP

Left Expansion

AXC F XT EXP

- 3 Modules can be extended



PLCnext Community

Starterkit with PLCnext Controller



1188165

PLCNEXT TECHNOLOGY STARTERKIT

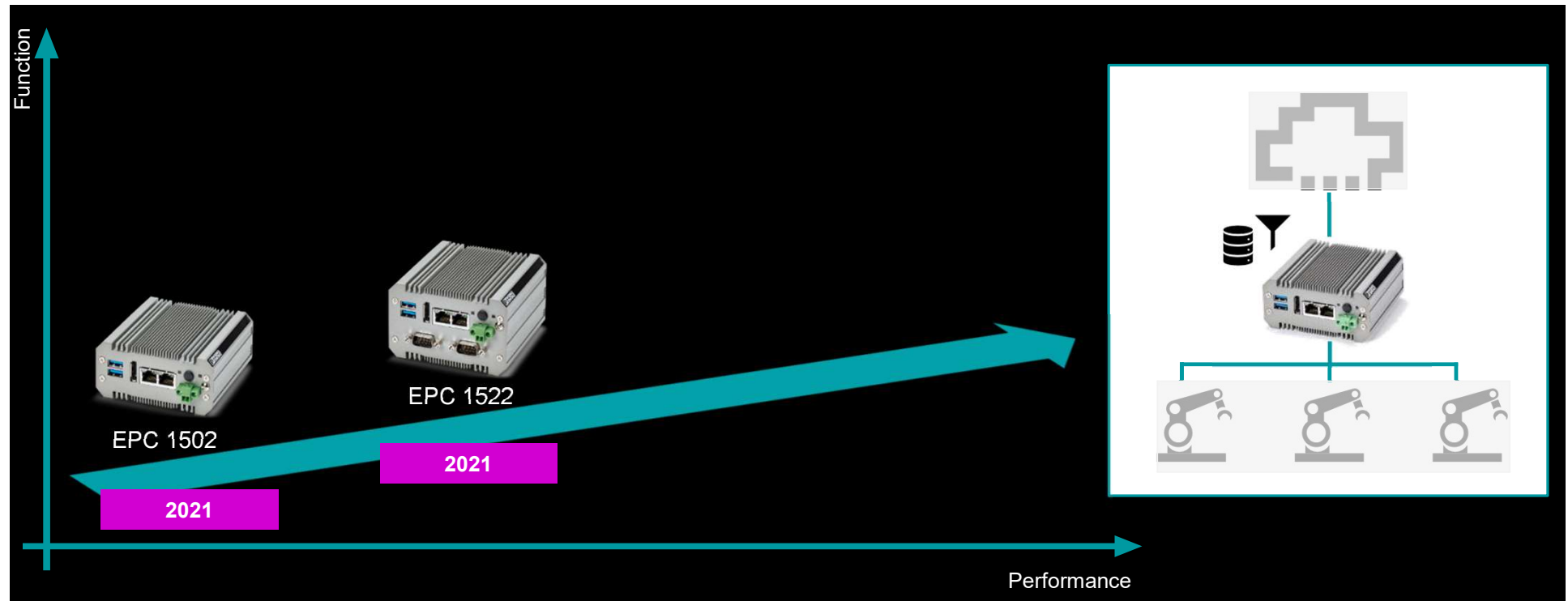


Unboxing Starter Kit

PLCnext Control

PLCnext Technology 
Designed by PHOENIX CONTACT

PLCnext Control for Edge Computing



Edge-PC 15x2

Product Features – EPC 1502



Core



**Intel Celeron
N3350 (Dual Core)**

RAM



2 GB RAM

Temperature



0°C-50°C

Storage



32 GB eMMC

Approvals



UL, CE

Features



**PLCnext RT
Edge Functions**

Release: Hannover fair 2021

Coming Soon

PLCnext Technology[®]
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Edge-PC 15x2

Product Features – EPC 1522



Core



**Intel Celeron
N3350 (Dual Core)**

RAM



4 GB RAM

Temperature



0°C-50°C

Storage



**32 GB eMMC +
128 GB m.2 SSD**

Approvals



UL, CE

Features



**PLCnext RT
Edge Functions
+Serial Interface**

Coming Soon

Release: Hannover fair 2021

PLCnext Technology[®]
Designed by PHOENIX CONTACT

Target Group

>>Collecting and (pre-)processing data locally to reduce the bandwidth load on the network while at the same time ensuring faster processing and thus lower delay times



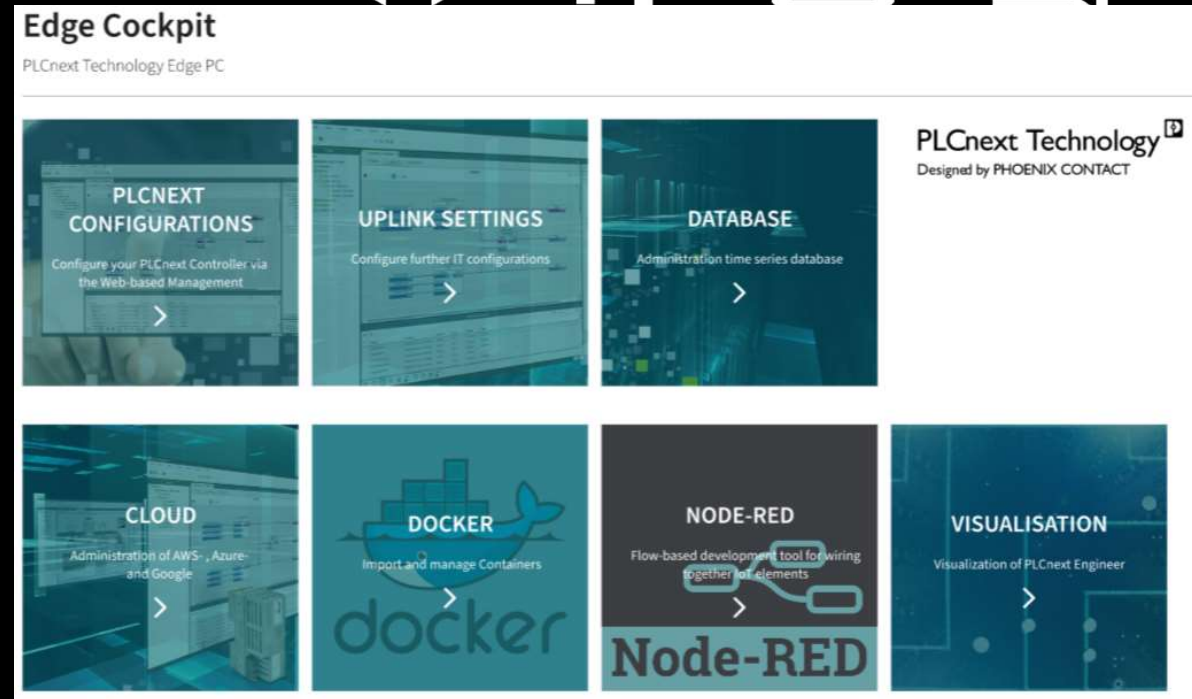
- Factory automation (focus)
- Mechanical engineering
- Infrastructure

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Edge-PC 15x2

EPC Feature Set

- PLCnext fully integrated
- Node-RED preinstalled
- Time-Series database preinstalled
- Docker and Portainer via PLCnext Store
- Easy cloud connection and certification
 - PROFICLOUD
 - Amazon Web Services
 - Microsoft Azure
 - Google Cloud
- ✓ Easily accessible via User-Interfaces
 - ✓ No Expertise needed
 - ✓ No command prompts needed
 - ✓ Consistent graphical programming



PLCnext TechnologyTM
Designed by PHOENIX CONTACT

On progress other new tolos

Device and Patch management Concept

- Device management software for security routers and firewalls
- The mGuard Device Manager management software allows you to create and manage all safety-relevant mGuard settings centrally at the click of a mouse. You then transmit the encrypted data selectively or to all managed mGuard security appliances in a single step.
- The configuration data can be downloaded again at any time and further processed in the mGuard Device Manager. This enables you to roll out firmware upgrades and license extensions in a targeted manner. You can use the upgrade history to check the firmware and reverse upgrades at any time.



Device Patch Management tools in the market

Overview IT

Product	Automatic Patch Deployment	Automatic Scans	Compliance Management	Customization	Network Wide Management	Remote Access/Control	Vulnerability Scanning
 ManageEngine Desktop Central ★★★★★ (187 reviews)	✓	✓	✓	✓	✓	✓	✓
 RMM ★★★★★ (68 reviews)	✓	✓	✓	✓	✓	✓	✓
 TOPIA ★★★★★ (16 reviews)	✓	✓	✓	✓	✓	✓	✓
 Avast Business Patch Management ★★★★★ (16 reviews)	✓	✓	✓	✓	✓	✓	✓
 XEOX ★★★★★ (7 reviews)	✓	✓	✓	✓	✓	✓	✓
 N-central ★★★★★ (34 reviews)	✓	✓	✓	✓	✓	✓	✓
 Acronis Cyber Protect Cloud	✓	✓	✓	✓	✓	✓	✓

Status

PLCnext Controller IEC 62433

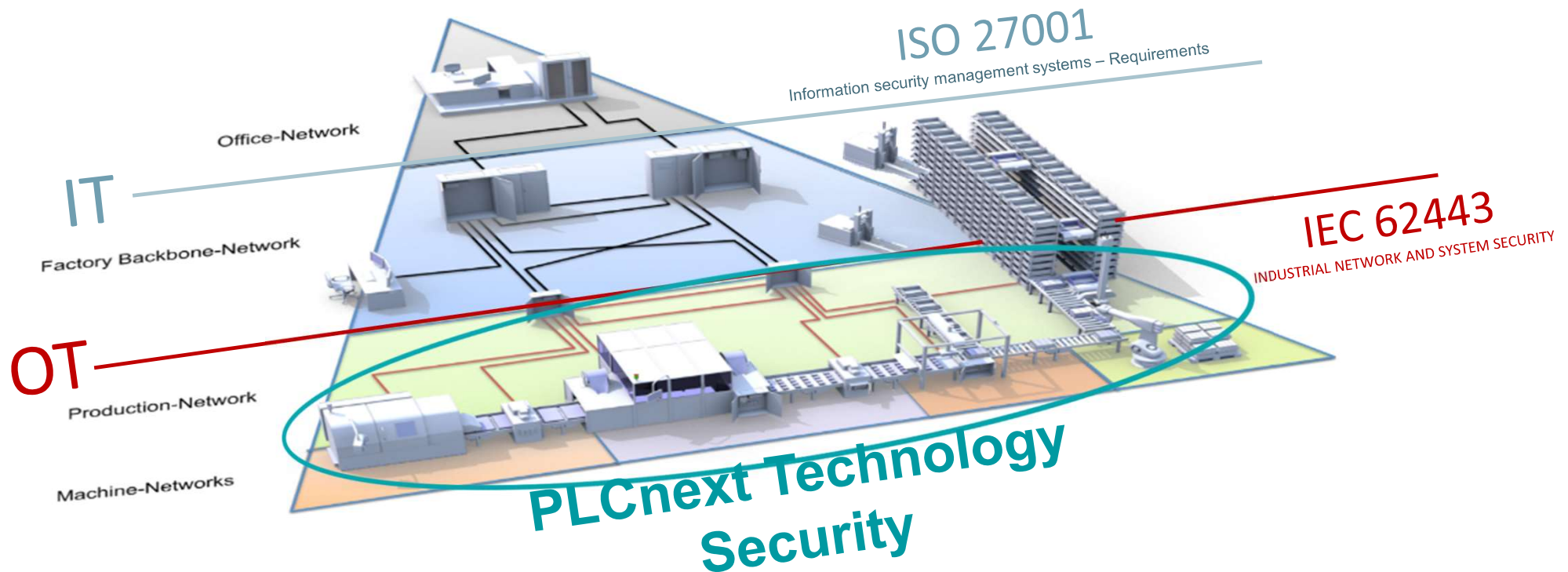
4 - 1



4 - 2

Why IEC 62443?

The “Automation Pyramid”



Why IEC 62443?

IEC 62443 Structure und Systematics

General	IEC-62443-1-1 Concepts and models	IEC-62443-1-2 Master glossary of terms and abbreviations	IEC-62443-1-3 System security conformance metrics	IEC-62443-1-4 IACS security life-cycle and use-cases	Role: Asset owner
	IEC-62443-2-1 Security program requirements for IACS asset owners	IEC-62443-2-2 IACS protection levels	IEC-62443-2-3 Patch management in the IACS environment	IEC-62443-2-4 Security program requirements for IACS service providers	
	IEC-62443-2-5 Implementation guidance for IACS asset owners				
Policies and procedures					Role: System integrator
System	IEC-62443-3-1 Security technologies for IACS	IEC-62443-3-2 Security risk assessment and system design	IEC-62443-3-3 System security requirements and security levels		Role: Device manufacturer
Component	IEC-62443-4-1 Product security development life-cycle requirements	IEC-62443-4-2 Technical security requirements for IACS components			

- Process requirements
- Functional requirements



Why IEC 62443?

Phoenix Contact IEC 62443 Certifications

General	IEC-62443-1-1 Concepts and models	IEC-62443-1-2 Master glossary of terms and abbreviations	IEC-62443-1-3 System security conformance metrics	IEC-62443-1-4 IACS security life-cycle and use-cases
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	IEC-62443-2-5 Implementation guidance for IACS asset owners			
	IEC-62443-3-1 Security technologies for IACS	IEC-62443-3-2 Security risk assessment and system design	IEC-62443-3-3 System security requirements and security levels	
Component	IEC-62443-4-1 Product security development life-cycle requirements	IEC-62443-4-2 Technical security requirements for IACS components		



	
CERTIFICATE No. Q48 029429 0007 Rev. 00	
Holder of Certificate:	PHOENIX CONTACT GmbH & Co. KG Flachmarktstr. 6 32025 Bielefeld GERMANY
Factory(ies):	PHOENIX CONTACT Electronic GmbH Industry Management and Automation Business Unit Control Systems Cringener Strasse 30, 31612 Bad Pyrmont, GERMANY PHOENIX CONTACT Software GmbH Langerhufstr. 6, 32057 Lemgo, GERMANY
Certification Mark:	
Scope of Certificate:	Secure Product Development Lifecycle
Applied Standard(s):	IEC 62443-4-1:2016 PPF 19502A:2018 (IEC 62443-4-1 Full Process Profile)
The Certification Body of TÜV SÜD Product Service GmbH certifies that the company mentioned above has established and is maintaining a management system which meets the requirements of the listed standards. The results are documented in a report. See also rules overhead.	
Report No.:	16CR618007
Valid until:	2021-07-29
Date:	2018-08-01
	
Page 1 of 1 TÜV SÜD Product Service GmbH - Certification Body - Industriestraße 65 - 80336 Munich - Germany	

Why IEC 62443?

Targeting 4-2 PLCnext Certification for AXC F 2152

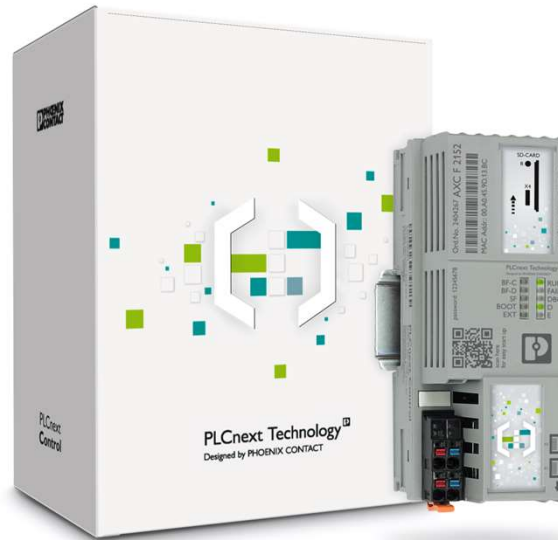
General	ISA-62443-1-1 Concepts and models	ISA-TR62443-1-2 Master glossary of terms and abbreviations	ISA-62443-1-3 System security conformance metrics	ISA-TR62443-1-4 IACS security life-cycle and use-cases
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System	ISA-62443-4-1 Product security development life-cycle requirements	ISA-62443-4-2 Technical security requirements for IACS components		
Component				



Why IEC 62443?

PLCnext Technology related Standards

4 - 1



4 - 2

- 62443-4-1 Ed.1.0 -**
IEC 62443-4-1 ED1: Industrial communication networks
- Security for industrial and control systems
 - Part: 4-1: Product development requirements

- 62443-4-2 Ed.1.0 -**
Industrial communication networks
- Security for industrial automation and control systems
 - Part 4-2: Technical security requirements for IACS components

PLCnext Security according IEC 62443

Agenda

Why IEC 62443?

62443-4-1 PLCnext Secure Development Lifecycle – Security by design

62443-4-2 PLCnext Security functionalities



Secure Development Lifecycle (SDL) according IEC 62443-4-1

Security Guidelines

PLCnext Security Manual must describe in detail:

- Security context
- Network connections
- Data storage and Management
- Security features
- Integration into central systems e.g.:
user management, logging, backup and restore
- How to update the product in the field



Secure Development Lifecycle (SDL) according IEC 62443-4-1

PSIRT Security Maintenance: Defect and Update Management

Product Security Incident Response Team (PSIRT) coordinates necessary processes:

- Offers confidential reporting channels for security vulnerabilities
- Assess security vulnerabilities
- Advise Mitigation actions
- Publish security advisories
- Updates are provided by the product BU's and must ensure authenticity and integrity

The screenshot displays the Phoenix Contact PSIRT website. The header includes the Phoenix Contact logo and navigation links. The main content area is titled "Product Security Incident Response Team" and features a graphic with a padlock and the text "Improving product security". Below this, a paragraph explains the team's role in responding to security vulnerabilities. A link "To the PSIRT website" is provided. On the right, there is a sidebar with "PHOENIX CONTACT" contact information and links to "Ask a question" and "Find product experts".

Below the main content, there is a section titled "Recent security advisories" which contains a table of advisories. The table has columns for "Description", "Language", and "Updated".

Description	Language	Updated
Security Advisory for Emulators, ILC 2050 R1 and ILC 2050 R1.1 (PDF, 49 KB) CVE-2020-14493, CVE-2020-1026, ICSA-20-024-03	English	20.08.2020
Security Advisory for PLCNEXT ENGINEER (PDF, 34 KB) CVE-2020-14499, CVE-2020-025	English	21.07.2020
Security Advisory for Automation Work Software Suite (PDF, 43 KB) PC Work, PC Work Express	English	02.07.2020
Security Advisory for PLC MOUNTED, TC MOUNTED, TC ROUTER and TC CLOUD CLIENT devices (PDF, 74 KB) PL MOUNTED, TC MOUNTED, TC ROUTER, TC CLOUD CLIENT	English	02.06.2020
Security Advisory for Phoenix Contact PL NAT 2xxx (PDF, 43 KB) PL NAT 220N, PL NAT 230A 300 30PP	English	18.05.2020
Security Advisory for PC WORKER SRT (PDF, 59 KB) PC WORK SRT	English	25.03.2020
Security Advisory for PORTICO Remote desktop control software (PDF, 59 KB) PORTICO SERVER	English	25.03.2020
Security Advisory for TC ROUTER & TC CLOUD CLIENT (PDF, 71 KB) TC ROUTER, TC CLOUD CLIENT	English	04.03.2020

At the bottom of the page, there is a link "Submit a vulnerability" and a "Back to top" link.

On the right side of the page, there is a "SERVICE" section with "Downloads" and "Subscribe to PSIRT news" links. The "Downloads" section includes links to "Application note (PDF, 5.13 MB)" and "Vulnerability handling process (PDF, 5.63 MB)". The "Subscribe to PSIRT news" section includes a link to "Subscribe" and a link to "Unsubscribe PSIRT news".

At the bottom right, there is a "Cooperation" section with a link to "Cooperation" and a logo for "VDE CERT".

PLCnext Security according IEC 62443

Agenda

Why IEC 62443?

62443-4-1 PLCnext Secure Development Lifecycle – Security by design

62443-4-2 PLCnext Security functionalities

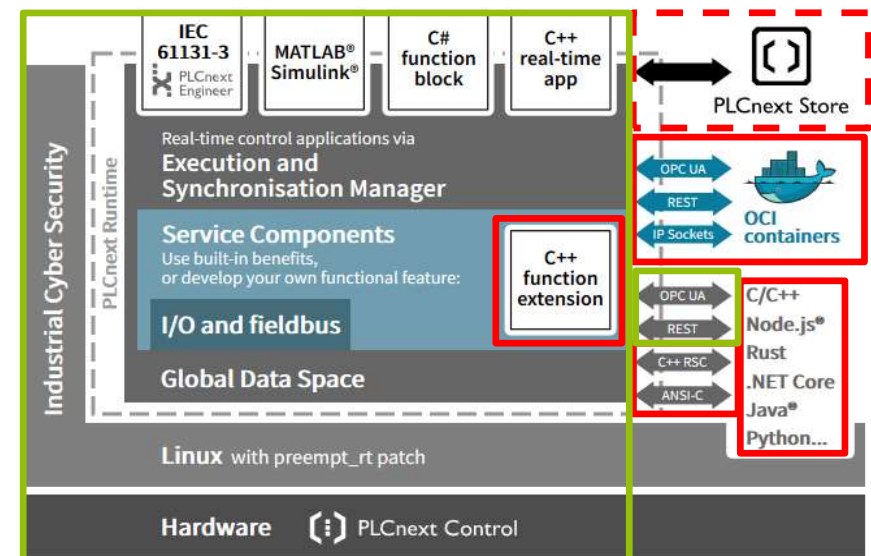


PLCnext Security functionalities

PLCnext AXC F 2152 Security Profil as general setup (1/2)

Security Profile enables an easy start up for PLCnext Security, supporting:

- Clean device (Reset 1) and Boot with integrity check
- Least functionality
 - Limited PLCnext openness
 - Only dedicated PLCnext ARP modules loaded
 - No root access, no SSH access, Admin switched off
- Authorization
 - Password complexity rules, lifetime restrictions and timeouts (brute force protection)
 - New roles “SecurityAdmin” and “SecurityAuditor” for device configuration and security monitoring
 - Central User Management systems support via LDAP
- Zone and deny of service protection
 - Firewall activated with WBM and Engineer only
 - Netload limiter pre-configured



PLCnext Security functionalities

PLCnext AXC F 2152 Security Profil as general setup (2/2)

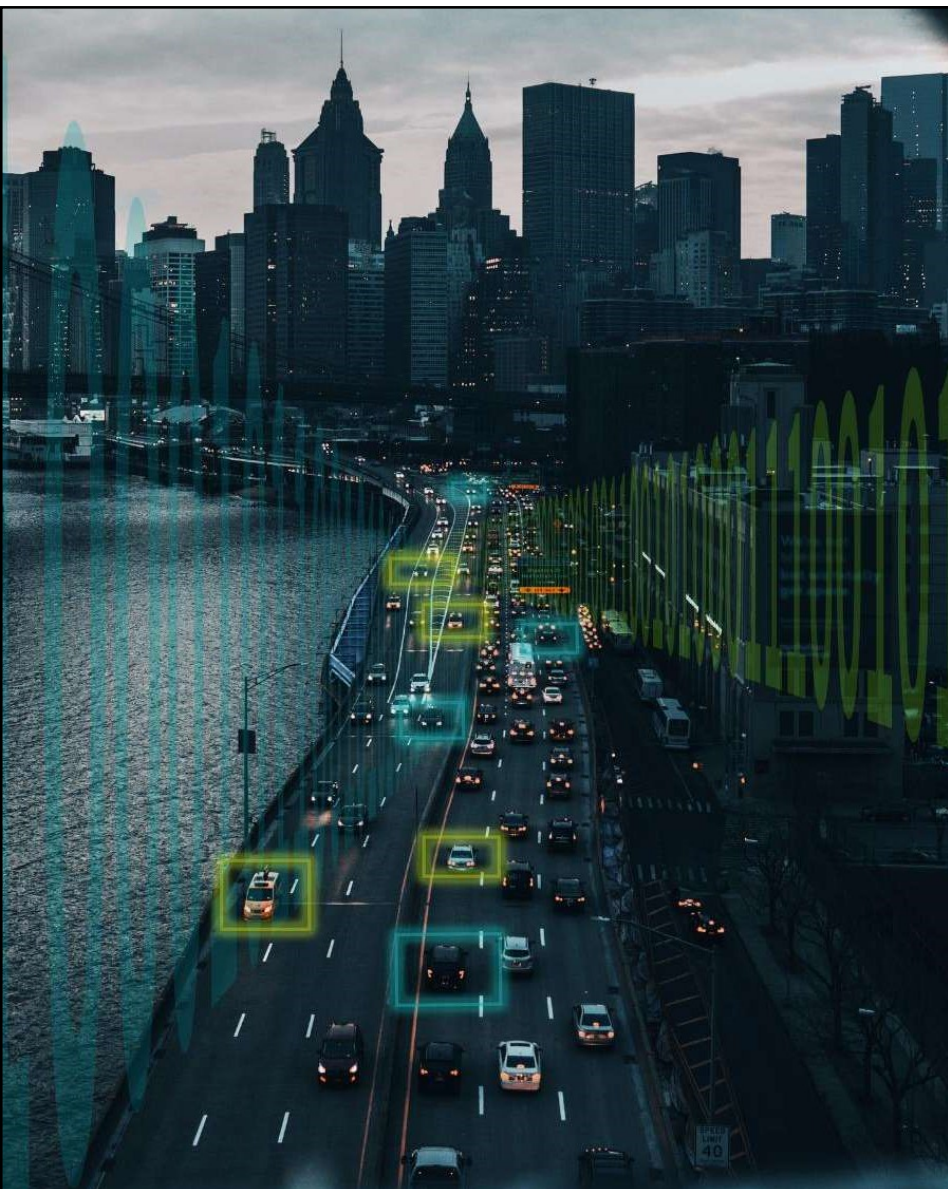
Security Profile enables an easy start up for PLCnext Security, supporting:

- Certificate Authority manages device identity and trusted partners
- Integrity and Authenticity of data in rest and transit
 - SD card with encrypted partition
 - Secured communication only TLS 1.2 and OPC UA (sign & encrypted)
- Security logging
 - protected security logging
 - connection to central server
- Explicit reactivation of PLCnext Features via WBM
 - eHMI, OPC UA,
 - PLCnext Store (offline only) might be activated (Security Context Threat Analysis required)
- Local Axioline I/Os
- Profinet can be activated after Threat Analysis and protection measurements from the Security Context
- Cabinet must be locked; Application must supervise cabinet accesses



AI for PLCnext Technology

PLCnext Technology 
Designed by PHOENIX CONTACT



Use Case: Vehicle Classification



Task

- Traffic counting for smart city applications
- Classification of different vehicle types



Application examples

- Monitoring of tunnel and parking garage entrances
- Traffic flow analysis and optimization



Added value

- Integrated solution from sensor to cloud
- Data protection, as only accumulated meter values are transmitted to the backend infrastructure

PLCnext Technology¹²
Designed by PHOENIX CONTACT

Product Features



AXC F XT ML 1000

CPU



Google Edge TPU
ML accelerator

Peak performance



4 trillion
operations per
second (TOPS)

PCIe Interface



PCIe Gen2
4 Gbit/s

Standardized interpreters



TensorFlow Lite or
AutoML

Edge-AI



No detours via
external
networks

Temperature



-20°C - 55°C

PLCnext Technology[®]
Designed by PHOENIX CONTACT

With the AXC F XT ML 1000 you can choose between an autonomous or cloud-based AI application while having a direct influence and interaction with your PLC variables.



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PLCnext Technology[®]

Designed by PHOENIX CONTACT

enhanced connectivity

Open interfaces and
cloud integration

PLCnext Technology enables the integration of current and future interfaces and protocols for open communication in highly networked automation systems. Implement new IoT-based business models through edge computing and/or direct connection to cloud-based services and databases.

PLCnext Technology – Cloud Connections

- Choose your way to set up the connection to your preferred cloud solution:
 - Use the sources directly from the cloud provider to implement the connection service in PLCnext
 - Choose the IIOT library to establish the connection using IEC 61131 languages
 - Take the PLCnext Apps from the PLCnext Store to connect easily to a cloud provider
 - Select the integrated Proficloud solution with PLCnext Engineer
-



Cloud Strategy for Intelligent Networking

Public Cloud, Private Cloud, any Cloud



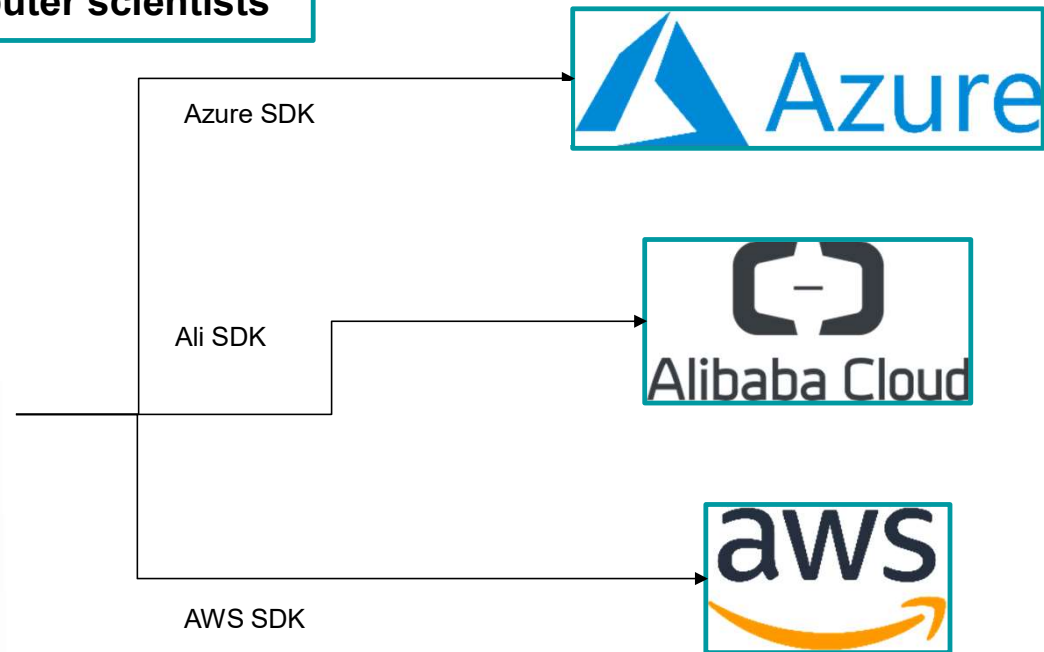
PROFICLOUD



Implement new IoT-based business models through direct connection to cloud-based services and databases. With the cloud agnostic strategy, a cloud connector to any cloud can be downloaded via PLCnext Store and a fully integrated ProfiCloud connectivity, PLCnext Technology provides full support for any cloud strategy - public, private, hybrid - including AWS, IBM, Azure, Alibaba and MindSphere.

Connecting to cloud provider

Connections for computer scientists



PLCnext Technology – IIOT-Library

Connecting to cloud provider

Connection solution for our
PLC programmer using
IEC 61131 languages

PHENIX CONTACT PLCnext Store

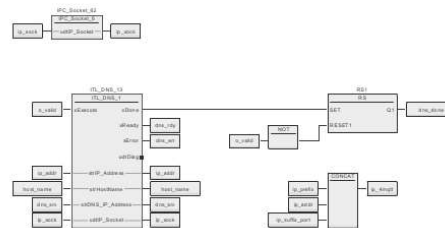
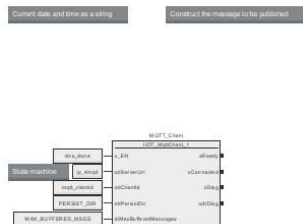
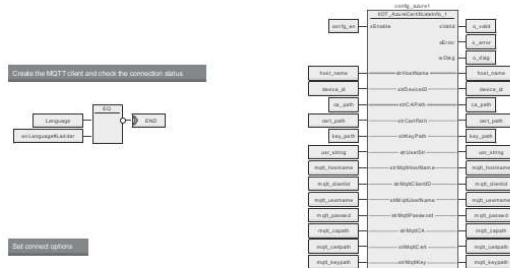


IIoT_Library
by Phoenix Contact GmbH & Co. KG

Library | Version: 1.0.0



Price per License: Free - 0.00€
Download this PLCnext Engineer Library and import it to use
in as many projects as you like. No license required.



Description

software library contains libraries and function blocks for "IIoT communication". With this library, PLCnext controllers can establish direct communication with cloud service providers. (Azure, Alibaba Cloud, etc.)
software package also includes tools for encoding and decoding JSON files.

Documents, Screenshots & Use Cases



Technical Details

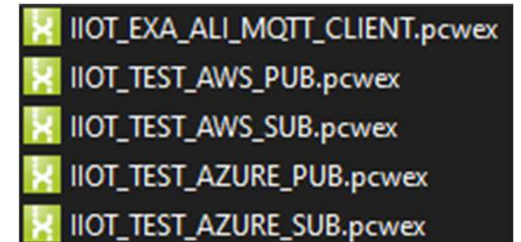
IIoT_Library_1.pdf

Support

Connecting to cloud provider

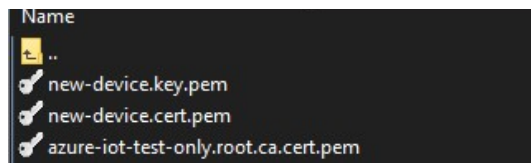
Function blocs and example projects for PLCnext Engineer:

- AWS IoT
- Azure IoT Hub
- Alibaba Cloud



SSL certificate based authentication:

- Secure your IoT solution hub using the X.509 Certificate Authentication



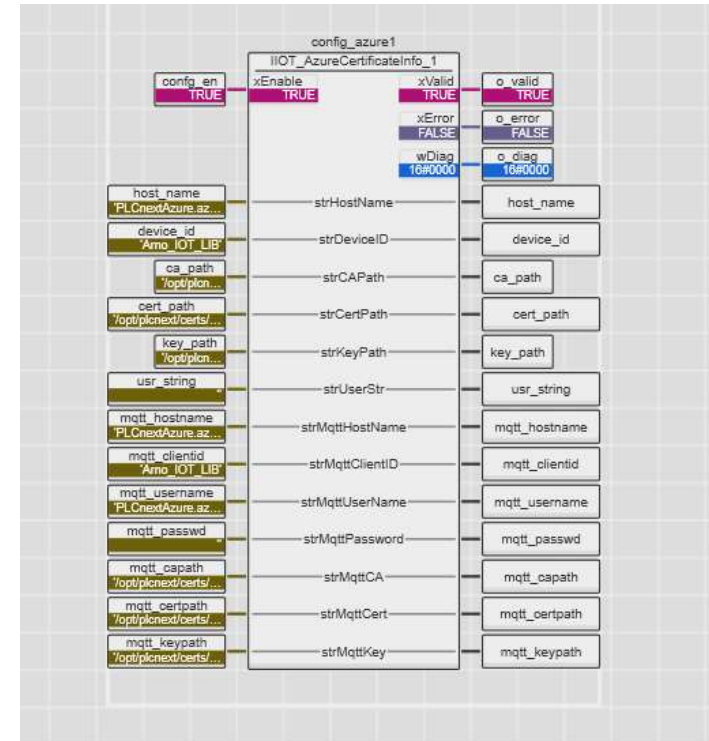
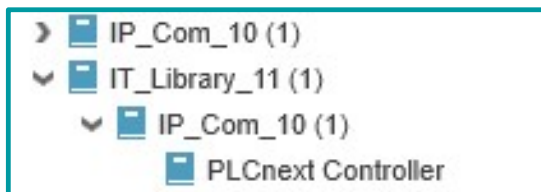
Connecting to cloud provider

Configuration Function Blocks:

- All application specific information to connect to your account

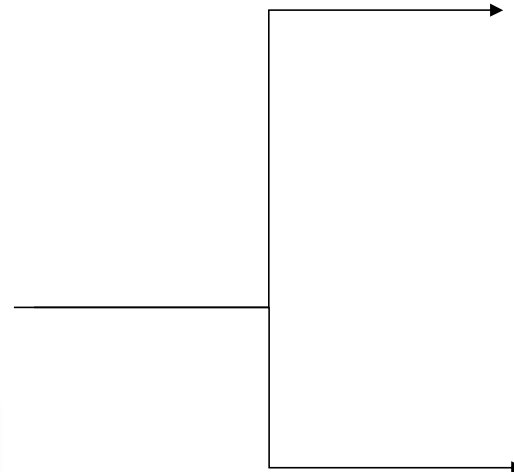
IP Connection Function Blocks:

- IT_Library and IP_Com library needed for connection
- MQTT and JSON libraries separately (2nd Version)



Connecting to cloud provider

Connections as PLCnext Apps



Alibaba Cloud Connector

Phoenix Contact GmbH & Co. KG

Get it

NEW | Function Extension

The Alibaba Cloud Connector can connect a PLCnext controller to the Alibaba Cloud via internet directly. By using this app, data can be transmitted bidirectionally between a PLCnext controller and the...

Free



AWS IOT Client

Phoenix Contact GmbH & Co. KG

Get it

Downloads: 29 | Function Extension

(Ord.No. 1226640) Send PLCnext Program data to an AWS IOT server (requires an active Amazon Web Services account with IoT Core service). Please read the attached Technical Details for more informatio...

10.00 €

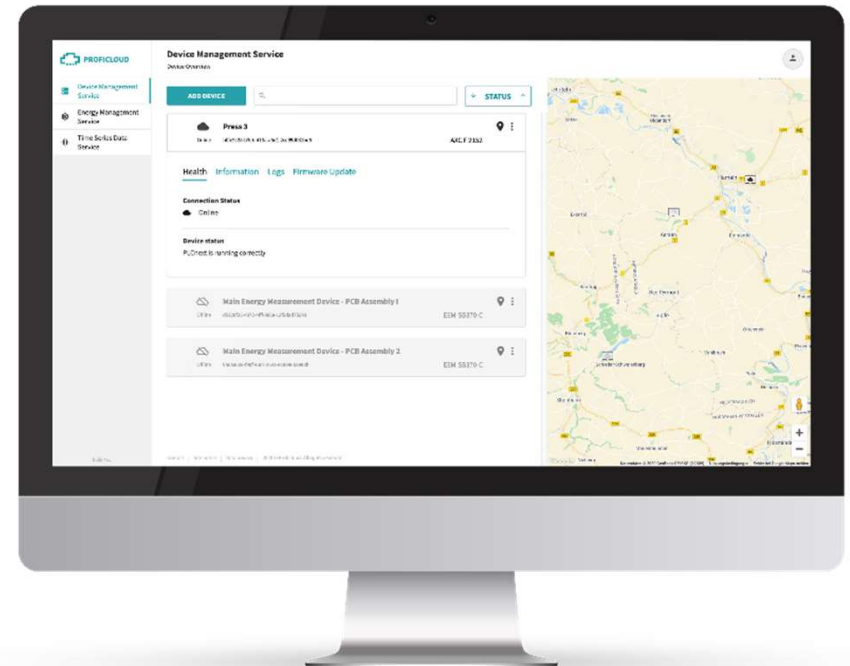
Time Series Data Service

- Device independent standard dashboard for all
- Ability to create custom dashboards with the metrics that devices send to Proficloud.io
- Diverse visualization options (graphs, stats, gauge, bar gauge, table, text, heat maps ...)
- Possibility to display data from different devices in one dashboard
- Possibility to set up different thresholds within the dashboards
- Naming and description of all dashboards and their associated panels



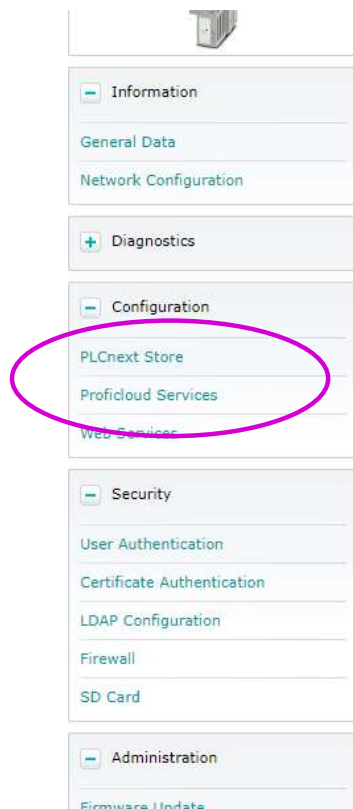
Device Management Service

- Showing the services available
- Organization possibility and sorting by status, name, device type
- Firmware updates for the devices can be done remotely.
- The user can store own log entries in the device log. These are identified by an additional log type.
- The Device Log automatically displays the log entries of the device.
- The health status of the added devices can be viewed online



Connecting to Proficloud Services

- Enable the connection to the PLCnext Store and Proficloud services in the WBM
- Default setting is: Disabled



Two screenshots of the Configuration page. The top screenshot shows the 'PLCnext Store' configuration. The bottom screenshot shows the 'Proficloud Services' configuration. Both screenshots have red circles highlighting the checkboxes for enabling the respective services.

Configuration

PLCnext Store

Information	
UUID	d88b037a-7fe9-41a5-b5a0-9903fc4bc028
PLCnext Store Connection	Connecting
Device Registration Status	Registered
PLCnext Store Status	The Proficloud service is not reachable. No domain name resolution possible.

Configuration	
Enable PLCnext Store Service	<input type="checkbox"/>

Configuration

Proficloud Services

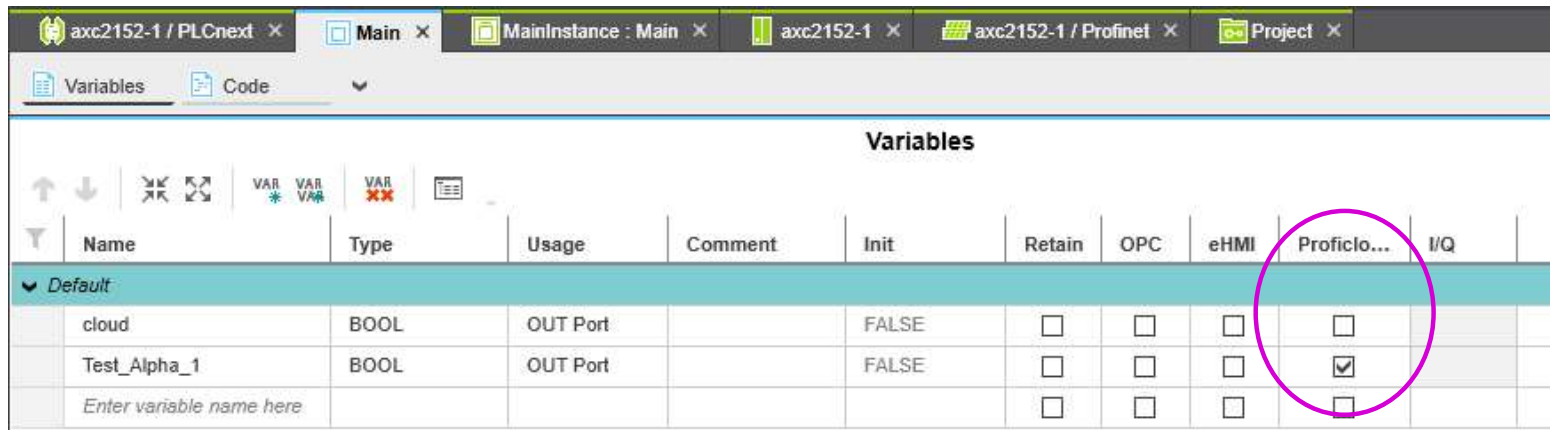
Information	
UUID	d88b037a-7fe9-41a5-b5a0-9903fc4bc028
Proficloud Device Management Status	Offline
Information	Proficloud is disabled.

Configuration	
Enable Proficloud Device Management	<input type="checkbox"/>
Enable Proficloud TSD at proficloud.io	<input type="checkbox"/>

Reset Apply

Connecting to Proficloud Services

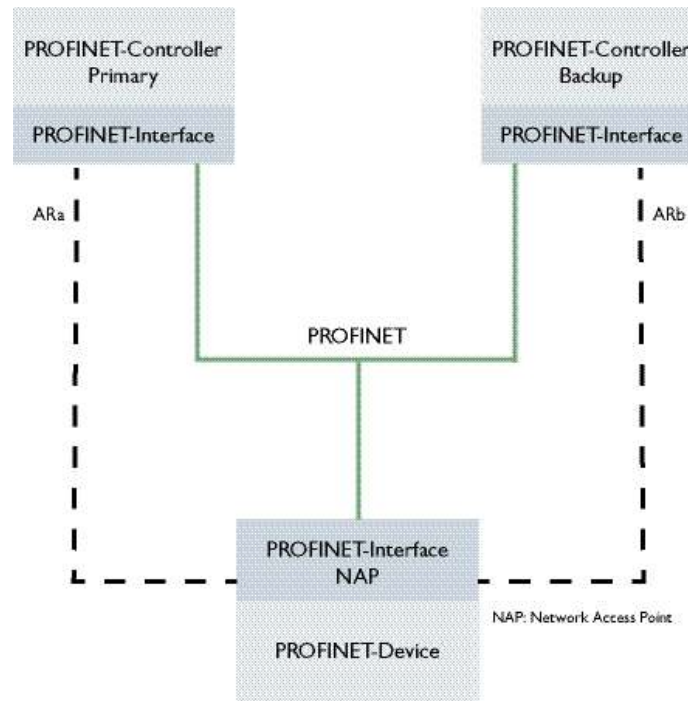
- Select your values in PLCnext Engineer



The screenshot shows the 'Variables' table in the PLCnext Engineer software. The table has columns for Name, Type, Usage, Comment, Init, Retain, OPC, eHMI, Proficloud, and I/Q. A purple circle highlights the checkbox in the 'Proficloud' column for the variable 'Test_Alpha_1', which is checked.

Name	Type	Usage	Comment	Init	Retain	OPC	eHMI	Proficloud	I/Q
cloud	BOOL	OUT Port		FALSE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Test_Alpha_1	BOOL	OUT Port		FALSE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Enter variable name here					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

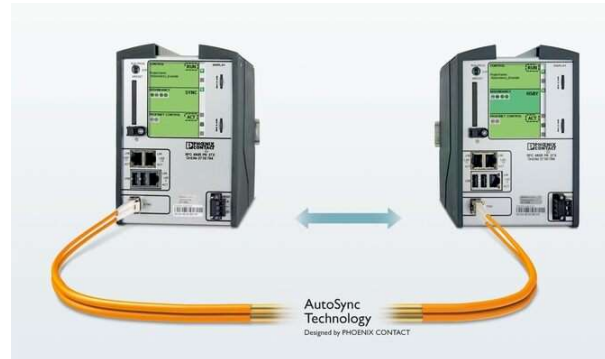
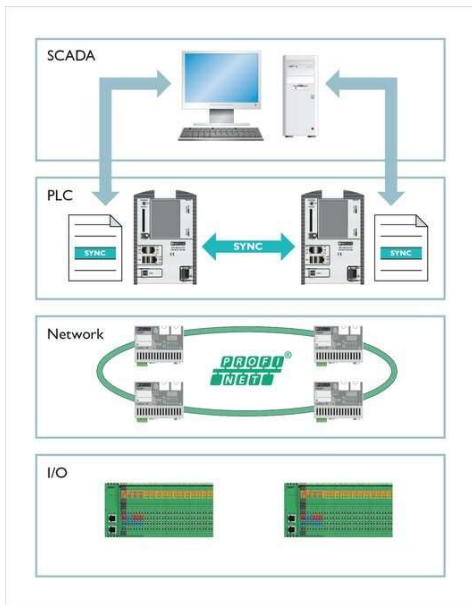
Redundancy



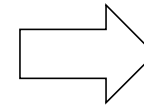
Redundancy AXC F 2152 and RFC 4072R

Stay tuned

RFC 4072R



RFC 460R

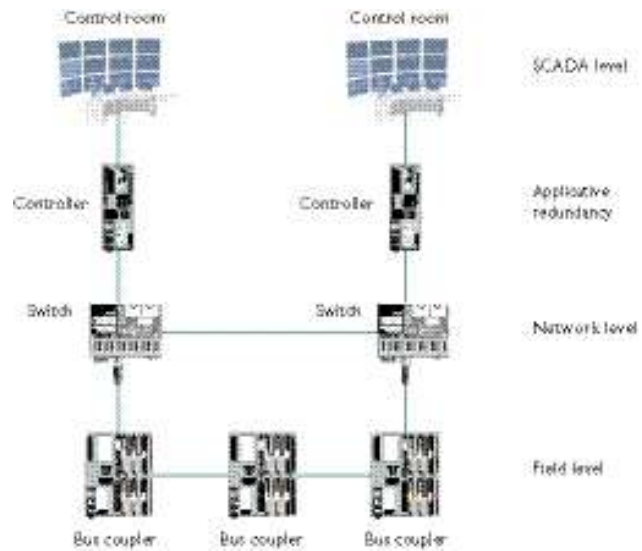


AutoSync TechnologyTM
Designed by Phoenix Contact

RFC 4072R

Stay tuned

AXC F 2152



AutoSync Technology[®]
Designed by Phoenix Contact

AXC F 2152R



Inline

THE INLINE SYSTEM

Redesigned
&
reduced in price
since 2021



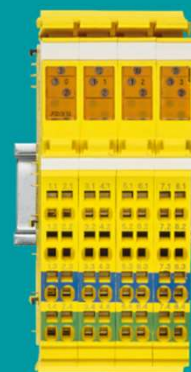
CONTROLLERS

Scales performance,
I/Os integrated programmable
with PC Worx



BUS COUPLERS

Compact, PROFINET,
EtherCAT®, CANopen +
Modbus TCP in 2021



I/Os

Compact, easy start-up,
safe and non-safe I/Os

Inline

Inline for building automation

“ The combination of the ILC 2050 BI and the Inline I/Os guarantees system openness, reliability and comfortable handling - resulting in a simple solution for building automation. ”



powered by
niagara
framework

Modular controller



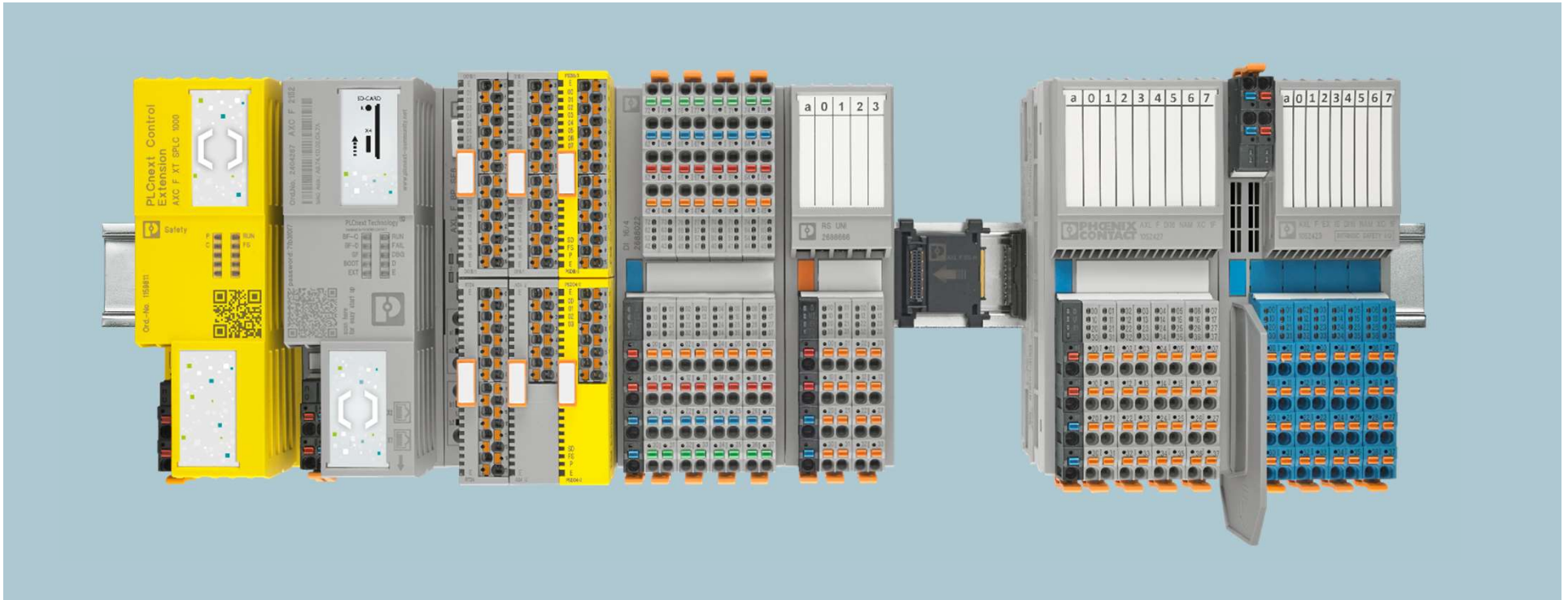
I/O terminals



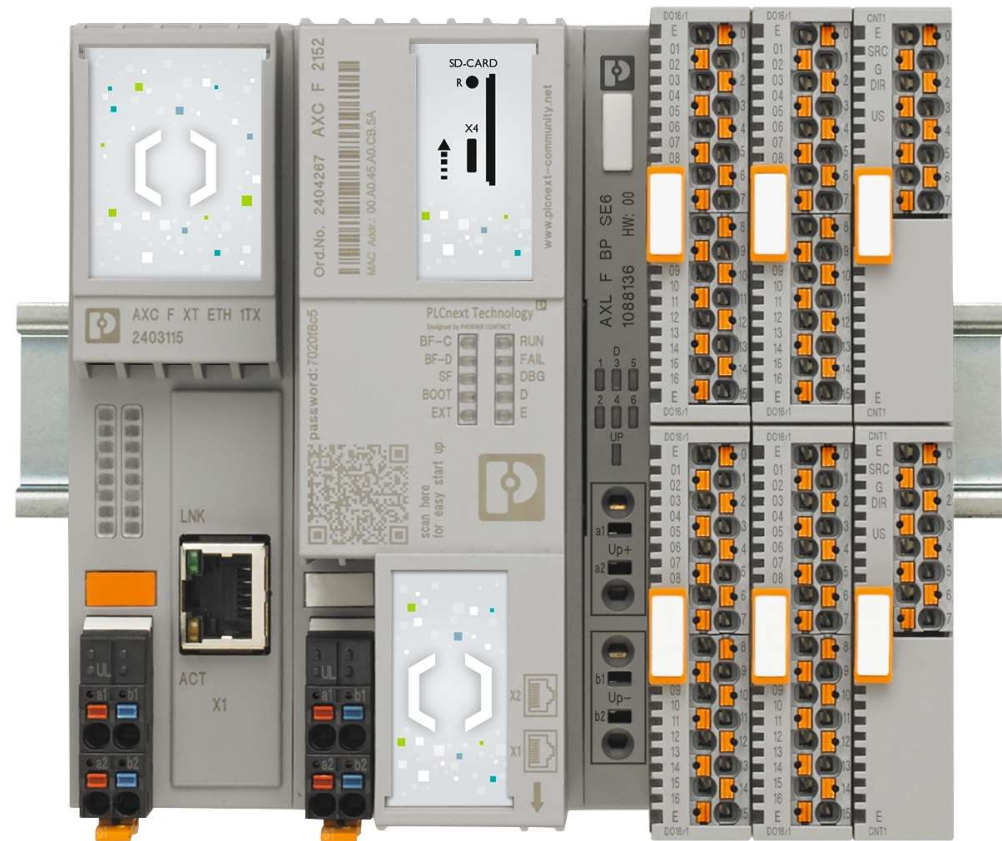
Contact the Building Technologies Sales
Team about the Emalytics Building
Management Solution

News from the I/O product families

PLC and I/O system toolbox



PLCnext Technology





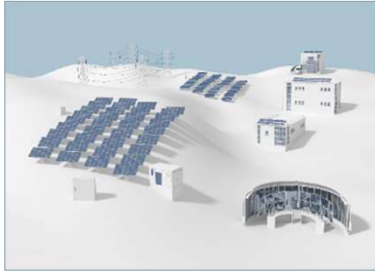
REALPARS Chapter 3 PLCNEXT TECHNOLOGY STARTERKIT

Axioline P

PLC and I/O systems



BASIC



APPLICATIONS



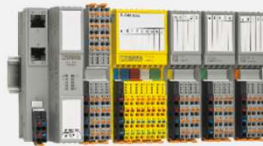
COMPLEX



INLINE



IO-Link



IO-Link



Ex HART
COMMUNICATION PROTOCOL

"AXIO F Control and I/O System"



AXIOLINE P