Vario-X

Decentralized Automation
Reinvented

MURR ELEKTRONIK

stay connected

Achieving digital transformation with our customers

Digital transformation is industry's solution to constantly increasing demands in productivity and quality. The entire production concept from development to the deliverable product, including the supply chain that feeds it all, can be tracked in real time.

Murrelektronik enables you to meet these increasingly complex goals with inventive solutions. Decentralized automation in a modular system makes your plant ready for the future and gives you space and throughput when production floors reach their capacity limits.

Our goal is to change the decentralized automation market. This offers you great opportunities.

The Vario-X system solves increasingly complex production challenges.

Vario-X is a modular system with solutions for every machine need imagined down to the smallest detail. You can plan and expand your system according to all the rules of the art — flexible, scalable, machine mountable and compact.

Decentralized systems eliminate the need for time-consuming installation. Set-up times and error sources are eliminated. Service and down-times are adjusted to your production cycles through predictive maintenance. Sounds complex, but Murrelektronik makes it quite simple!

We will show you what this looks like in detail.

Things simply connected.

Ready for the Future!

Vario-X is a holistic automation system from the sensor to the cloud. The system is designed with machine builders in mind. By applying agile design processes, we work together from project planning through the creation of a digital twins enabling the seamless integration of IT and OT. With apps, you can monitor your changing factory environment via secure endpoint devices and use that data to optimize production – and of course all this structured in a modular way. The highlight, however, is the advanced sensor technology integrated into each module to ensure optimal performance and availability, guaranteed by predictive maintenance.
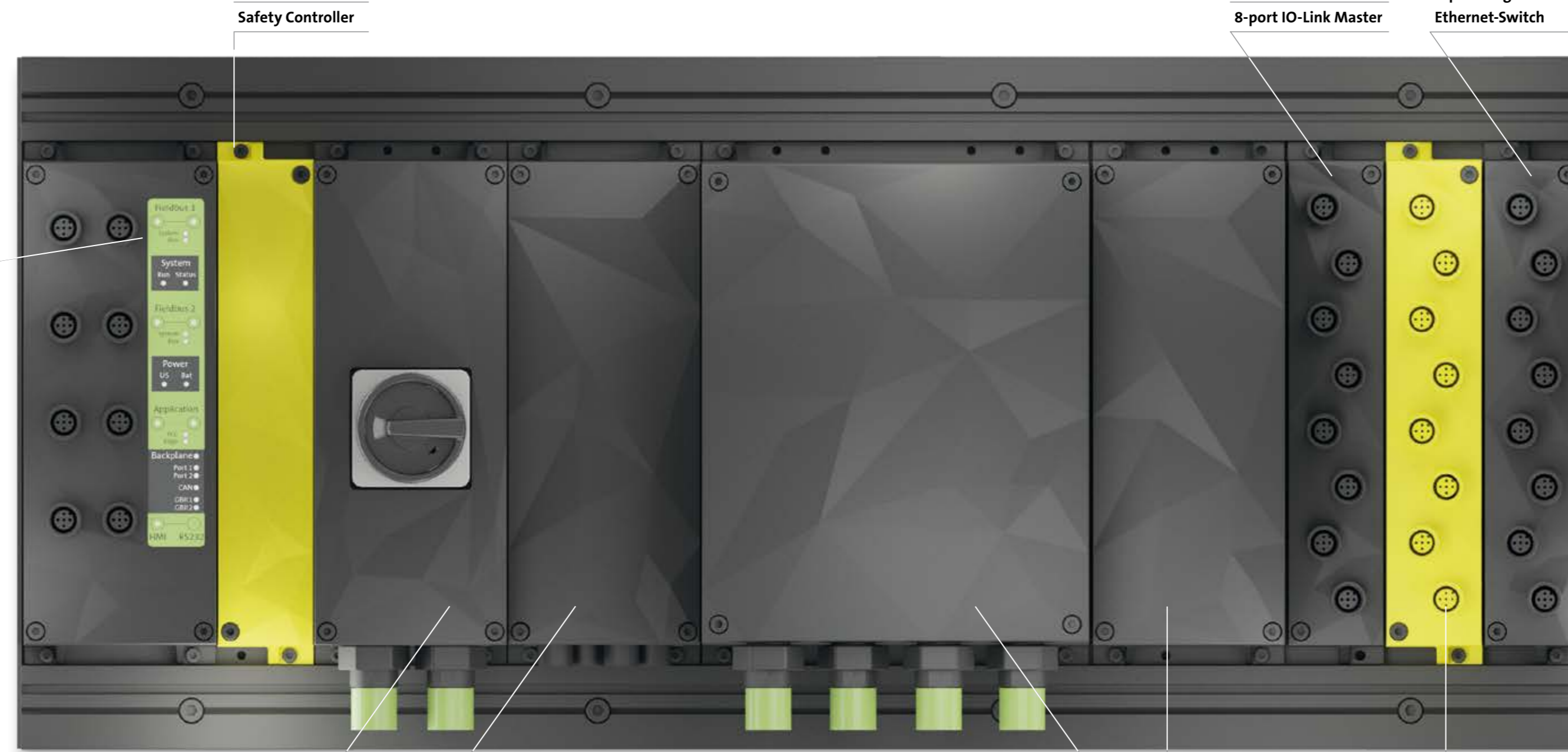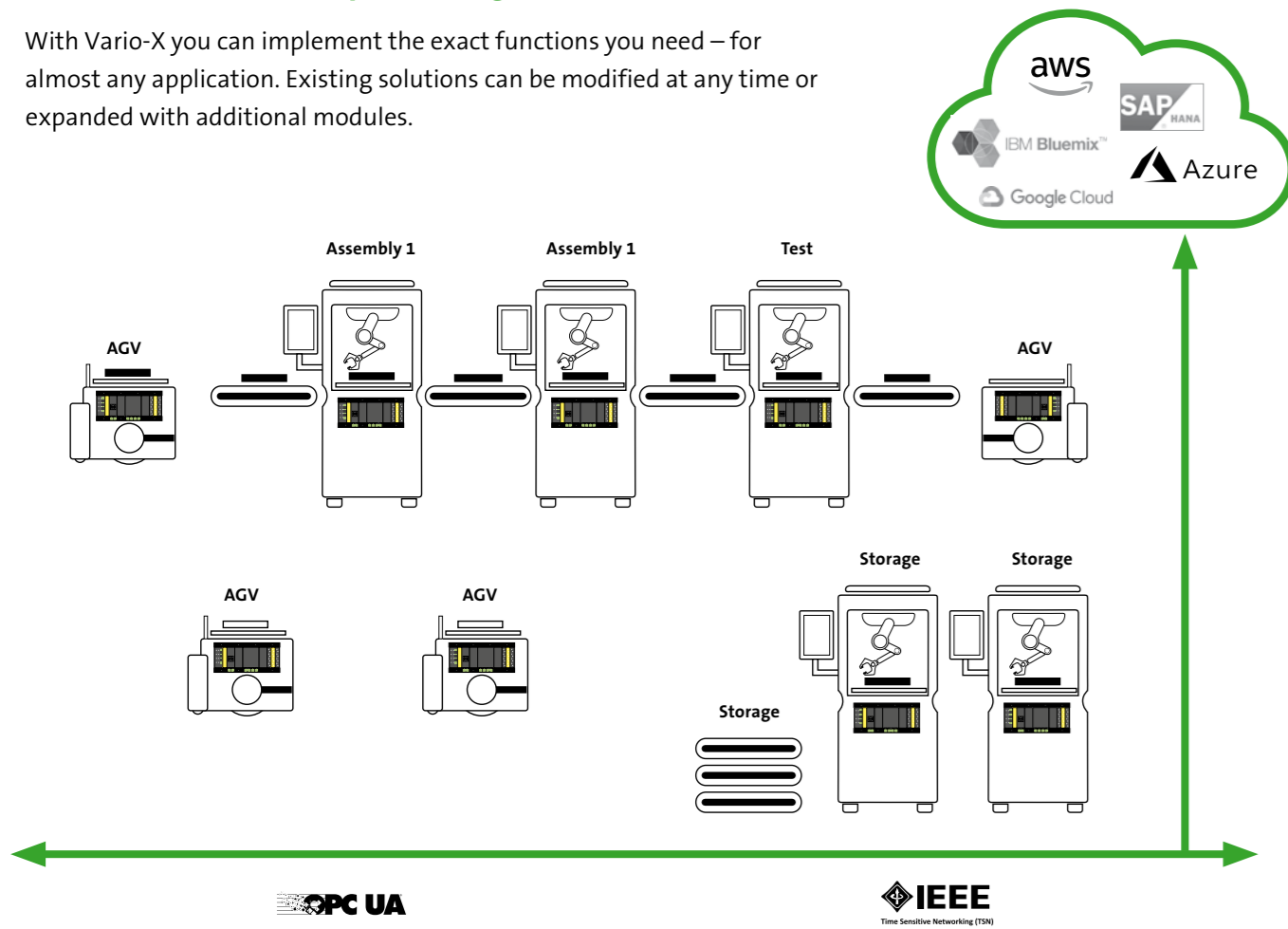
Backplane – The integrated mechanical engineering profiles in the backplane are compatible with all common systems which means for you are free of any system exclusivity. All system components are designed for commercially available mounting hardware. All modules are REACH and RoHS compliant.

Industrie PC – The brain of a Vario-X system is our Vario-X Controller. Equipped with a multicore CPU it supplies the entire system with life, speaks all languages and, as an open control platform, can also be integrated without limits. W-LAN, 5G and Bluetooth as well as OPC-UA and MQTT ensure seamless communication throughout the factory of the future.

Modular machine and plant design

With Vario-X you can implement the exact functions you need – for almost any application. Existing solutions can be modified at any time or expanded with additional modules.

Vario-X is an open, flexible and scalable automation platform with maximum performance at all levels and at all interfaces.

Safety Controller

8-port IO-Link Master

8-port Single Pair Ethernet-Switch

Feed-in with main switch – Our Vario-X main switch supplies the backplane with 400 volts. It is fed in via an MQ15 AC connector.

Reliable power supply for electronics – 24 V 20 A divided into 2 x 6 A on a Y-coded M12, 1 x 8 A on the backplane, and an L-coded M12.
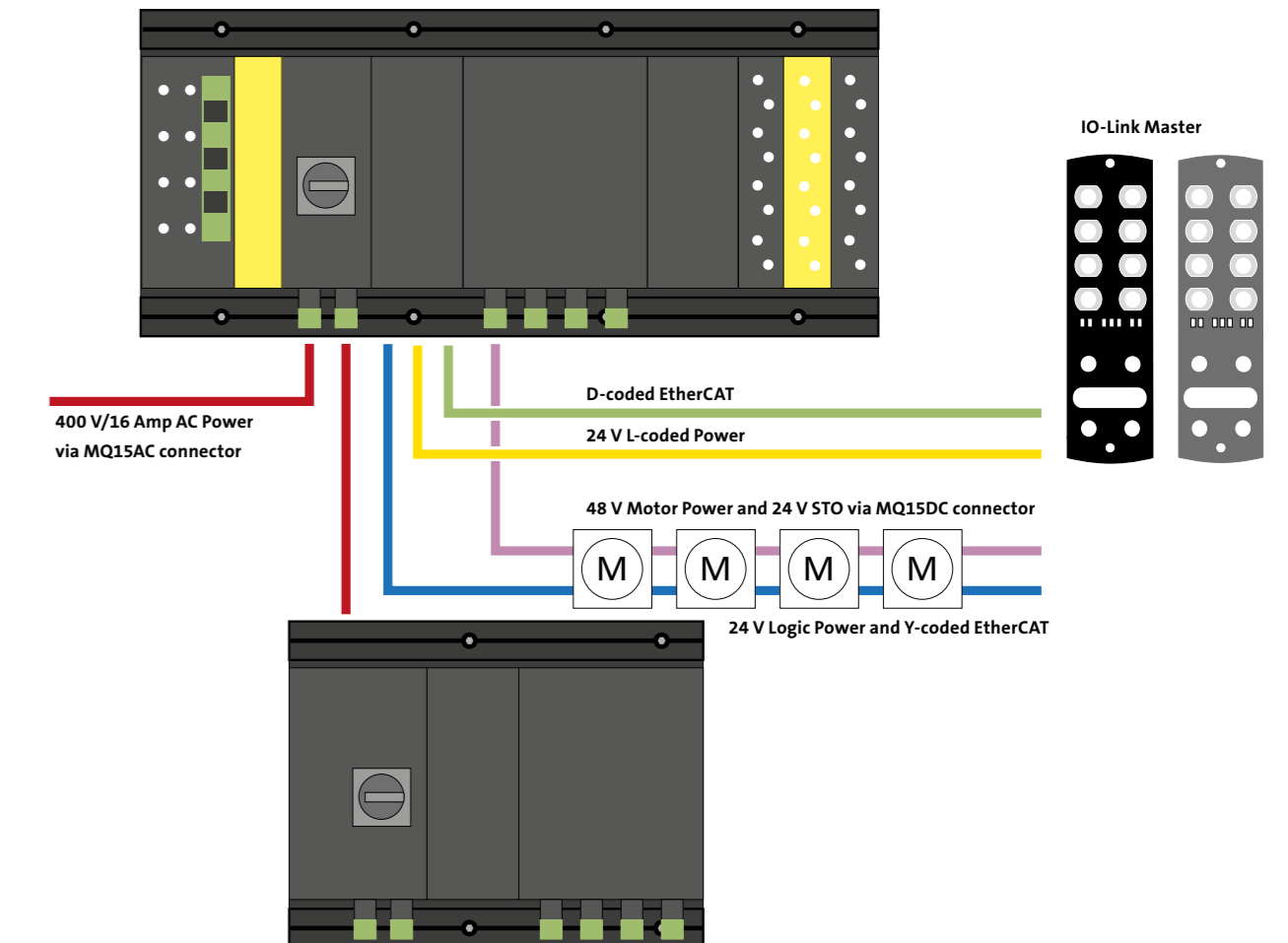
Robust power supply for drive technology – With a 48 V / 3.6 kW power supply, Vario-X is regenerative and supplies the drives that are connected via our MQ15 DC quick connect cordset. The hybrid cable supplies servo modules and actuators that can be safely switched off in an emergency with the STO signal.

8Ah Li-Ion battery to buffer the IPC – to ensure fast start-up times from sleep mode.

EtherCAT Safety – IO with 16/4

Well thought-out at all levels

The Vario-X Controller has multiple assignable network connections.

IO-Link Master

400 V/16 Amp AC Power via MQ15AC connector

D-coded EtherCAT

24 V L-coded Power

48 V Motor Power and 24 V STO via MQ15DC connector

24 V Logic Power and Y-coded EtherCAT

Rethinking decentralized automation

The unique Vario-X automation system is already responding to the market needs of tomorrow, and our customers see it. Together, we set up a digital twin that takes all the configurations and spatial conditions of your machine and fits it perfectly into the real environment of the Vario-X. To this end, we are constantly communicating with you, working together in agile project teams and developing an automation solution that is precisely tailored to your production.

Decentralized and modular. This is a matter of course for us

Specially developed for the housing, Murr-elektronik's Temperature Control Technology in Vario-X has a highly efficient internal heat dissipation, which protects the electronics from overheating while giving the housing additional stability. This equals maximum machine protection and performance.

Smart Installation System

By using our premolded cables and our H-Distributor or T-Coupler, you can expand your installation to meet your needs.

One advantage of using either is the simple looping of a power supply. It's 40 % faster than a classic

control cabinet while lowering your wiring efforts up to 75 %.

T-Coupler

h-Distributor

We would be happy to develop a solution that fits your application

To test us, email the Vario-X team: **Vario-X@murrelektronik.de**

Or call the Vario-X team: **Phone +49 71 91/47-4470**

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www.murrelektronik.com