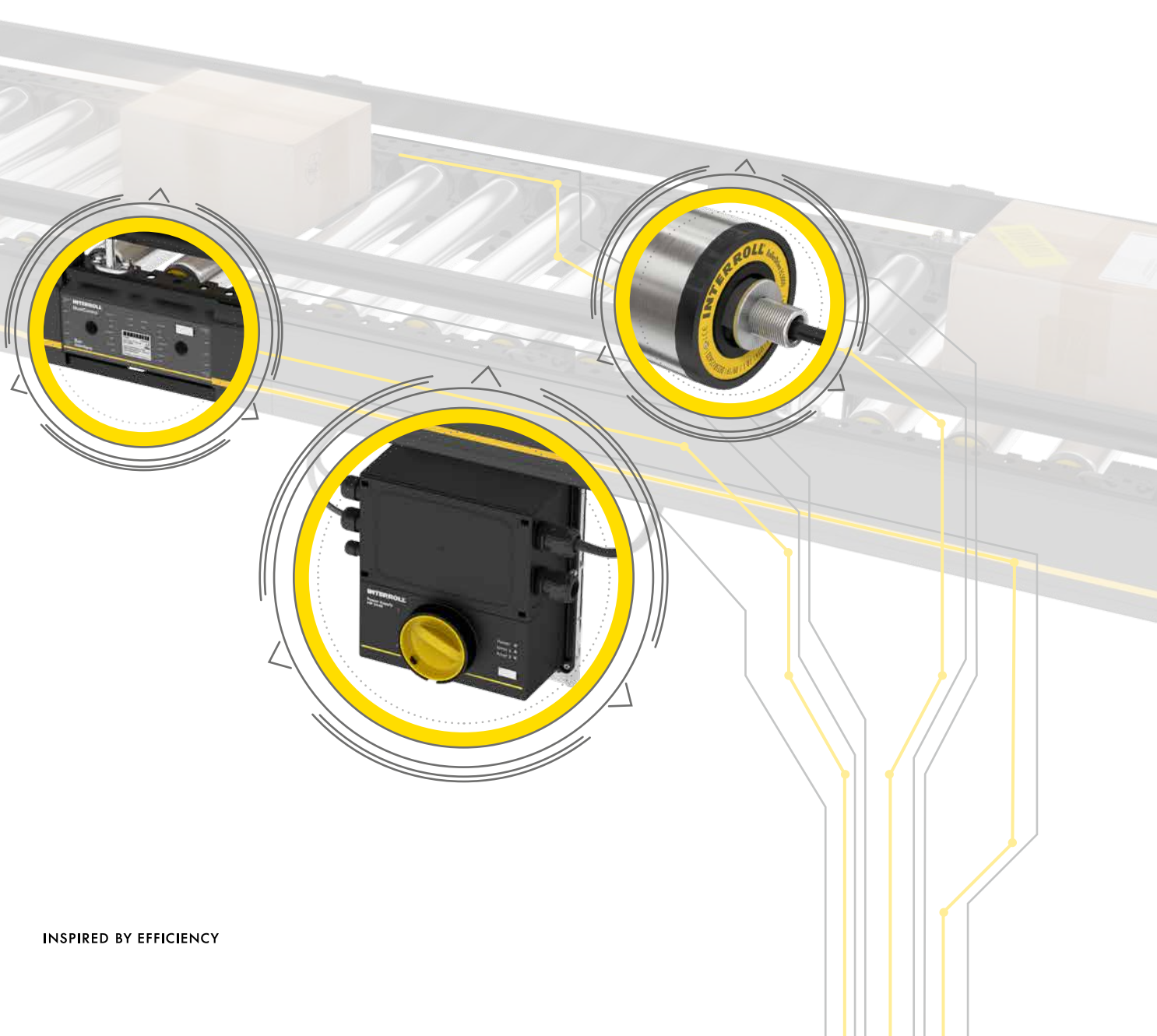




Interroll Smart Solutions DC Platform



Smart: Interroll DC Platform

From standard applications to systems with Industry 4.0 functionality:
The new DC Platform has the perfect solution to any request.

Many system integrators and plant constructors face the challenge of how to cost-effectively create a tailored system with plug-and-play solutions. The new DC Platform from Interroll is a high-performance technology platform that does just that. It offers – from a single supplier – an innovative, coordinated range of technological solutions, all based on years of development and testing.



48 V

Interface
Bus

Ø
**50/60
mm**



20 W



35 W



50 W

NEW: Economical solutions with 48 V

The DC platform's new capabilities of producing effective zero-pressure-accumulation (ZPA) conveyor solutions are apparent from the electrical voltage alone: With its 48 V technology, Interroll is capitalizing on the technical evolution taking place in protective extra-low voltage solutions. 48 V systems facilitate the use of up to **50 percent fewer** power units than 24 V systems; they allow for **longer cable lengths** and **smaller wire cross sections** and **reduce** the number of **error sources**, for instance as a result of voltage drops on the wires. This significantly **reduces the investment** required in the entire system and the risk of errors during commissioning.

NEW: Ready for Industry 4.0 with bus interface

Data transparency: Thanks to the new bus interface, more than **100 parameters** can be selected and set. The bus interface is based on the CANOpen standard and paves the way for the fully automated world of Industry 4.0. In combination with the multi-protocol capability of MultiControl BI (for PROFINET, EtherNet/IP and EtherCAT), this means that users can always **visualize** the data and functions on the screen using the PLC or a web interface. As such, the current operating status, torque and temperature of each and every drive can be read out. The **built-in service life indicator**, for instance, facilitates **preventive maintenance**, which can be completed during quieter periods of operation. This, in turn, significantly increases the **availability** and **efficiency** of the system.

NEW: Precision positioning for robotic applications

The bus interface not only enables the new RollerDrive EC5000 to read out operating data, but also facilitates **millimeter-accurate positioning**. Automated processes are perfectly supported and **efficiently integrated**, without the need for additional cabling. This makes the interplay between the conveying technology and systems deploying robots or gripper arms **much simpler**.

Closer look at the technology

Intelligent RollerDrive EC5000

As the most extensive range of motor rollers on the market, this series has the ideal drive to suit the requirements of any conveyor system.

20 W variant:

Cost-efficient conveyor solution for moving lightweight materials or empty trays.

35 W variant:

Covers the majority of tray conveyor applications and is compatible with its well-established predecessor, the EC310.

50 W variant:

The perfect choice for conveying heavy materials of up to 250 kg; also available with a diameter of 60 mm.

Intelligent RollerDrive EC5000	
Voltage	24 V DC and 48 V DC
Power	20 W/35 W/50 W
Conveyor speed	Up to 2.41 m/s
Acceleration torque	Up to 13 Nm
Interfaces	Analog/bus
Tube diameter	50/60 mm
Protection rate	IP54/IP66
Ambient temperature	-30° C to +40° C



Compact switching-mode power units

The robust switching-mode power units with **IP54 protection rating** are **installed exactly** where the protective extra-low voltage is needed, rather than in the switch cabinet, allowing for much **shorter cable lengths**. The **space-saving** switching-mode power units in 24 V or 48 V have a **50 percent higher peak output** and feature integrated **brake chopper**, automated **power limit** and adjustable **cable protection**. They can also produce an integrated **analysis** of the status, either via LED or a signal cable to the programmable logic controller (PLC). A switch that can be secured against being turned back on allows maintenance work to be carried out on individual sections of the conveyor while other sections are still in operation.

Compact switching-mode power units	
Wide-range input	380–480 V AC
Power and top output	960 and 1440 W
Mains frequency	50–60 Hz
Rated output current	40 A at 24 V AC and 20 A at 48 V DC
Rated output voltage	24/48 V DC
Ambient temperature	-30° C to +40° C
Protection rate	IP54



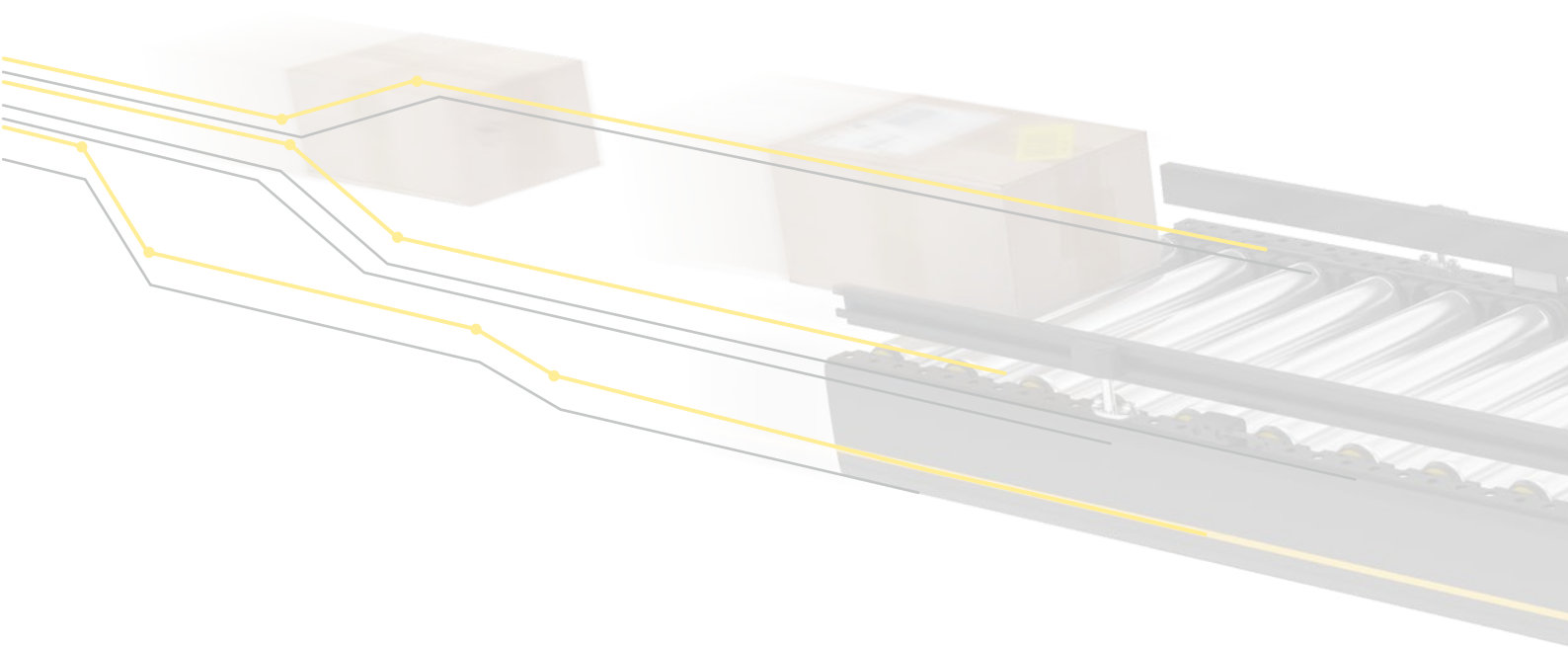
Controls for every application



	DriveControl 20 DriveControl 54 DriveControl 2048	ZoneControl	ConveyorControl*	MultiControl AI MultiControl BI	
Function	Interface for one EC5000 via digital I/Os	Single-zone control with peer-to-peer communication for one EC5000	Field bus-based control system for two EC5000 units	Control system based on industrial Ethernet for four EC5000 units	
ZPA logic included		X	X	X	
Characteristics	Easy handling, no field bus handling	No addressing needed	Easy wiring and setup, communication to PLC via GatewayControl	Certified Ethernet controller	
Typical application	- Continuous running conveyor - Smaller systems - PLC available without field bus	Independently controlled ZPA conveyor without PLC	Independently controlled ZPA conveyor. PLC can monitor and influence/interrupt the ZPA logic.	- PLC-managed conveyor systems - Bigger systems	
Communication with PLC	EtherCAT			X	
	EtherNet/IP		X (GatewayControl)	X	
	PROFIBUS		X (GatewayControl)		
	PROFINET		X (GatewayControl)	X	
	Digital I/Os, no field bus	X	X		
Parameter settings	DIP switch (DriveControl 2048 with rotary switches)	DIP switch	Via Configurator software	Via PLC or web browser interface	
Interface to EC5000	Voltage	24 V DC (DriveControl 2048: 24 or 48 V DC)	24 V DC	24 V DC	24 or 48 V DC
	Start/stop ramps configurable	Only fast and slow (DriveControl 2048 with 8 different ramps)	No	Yes	Yes
	Bus interface				MultiControl BI
	50 W version	DriveControl 2048			X
I/O connections	Zone sensors	0	1	2 (SegmentControl)	4
	Additional I/Os	0	1 (start sensor)	2 inputs/3 outputs (ComControl)	4 I/Os (configurable)
Protection rating	IP20 DriveControl 54: IP54	IP20	IP54	IP54	
Suitable for deep-freeze applications	DriveControl 54		X	X	

* With GatewayControl

ZPA = zero-pressure accumulation; PLC = programmable logic control; AI = analog interface; BI = bus interface; I/Os = inputs and outputs



- **Backward compatibility**
- **Expert application advice**
- **All-round service**
- **Ultimate quality**
- **Extremely fast lead times**

This perfectly compatible range of controls, motor rollers and power units, even in combination with Interroll's Modular Conveyor Platform (MCP), offers a unique choice of conveying solutions – from autonomous conveyors that can be commissioned on a plug-and-play principle and without a PLC, all the way to tailor-made high-performance systems that can be integrated consistently and transparently into the data universe of Industry 4.0 applications for the purpose of monitoring in control stations, for preventive maintenance or for other functions.

Find out more at interroll.com or contact us. We look forward to hearing from you!

Interroll reserves the right to modify the technical characteristics of all its products at any time. Technical information, dimensions, data and characteristics are indicative only.