# You are automating tomorrow's world
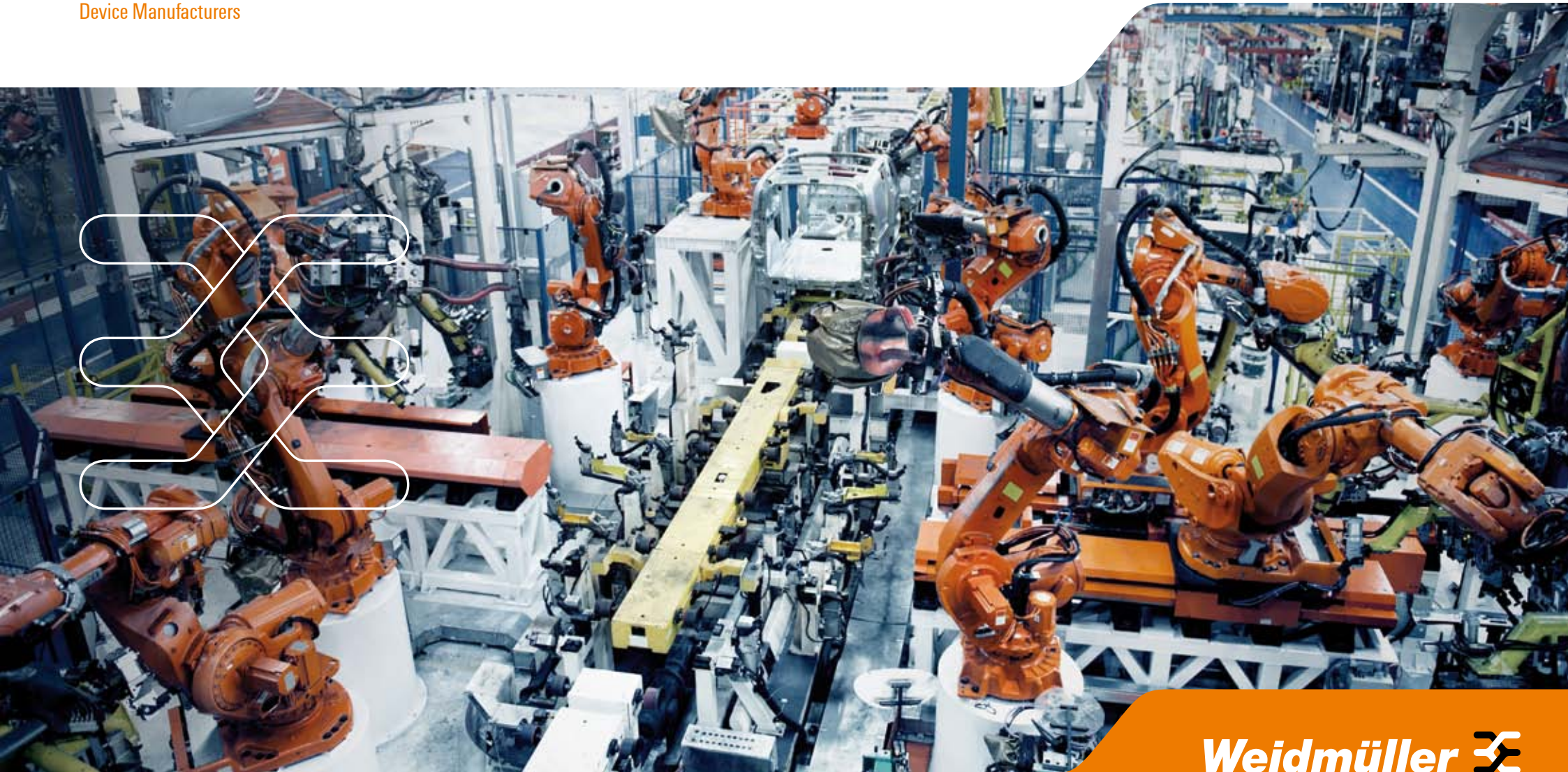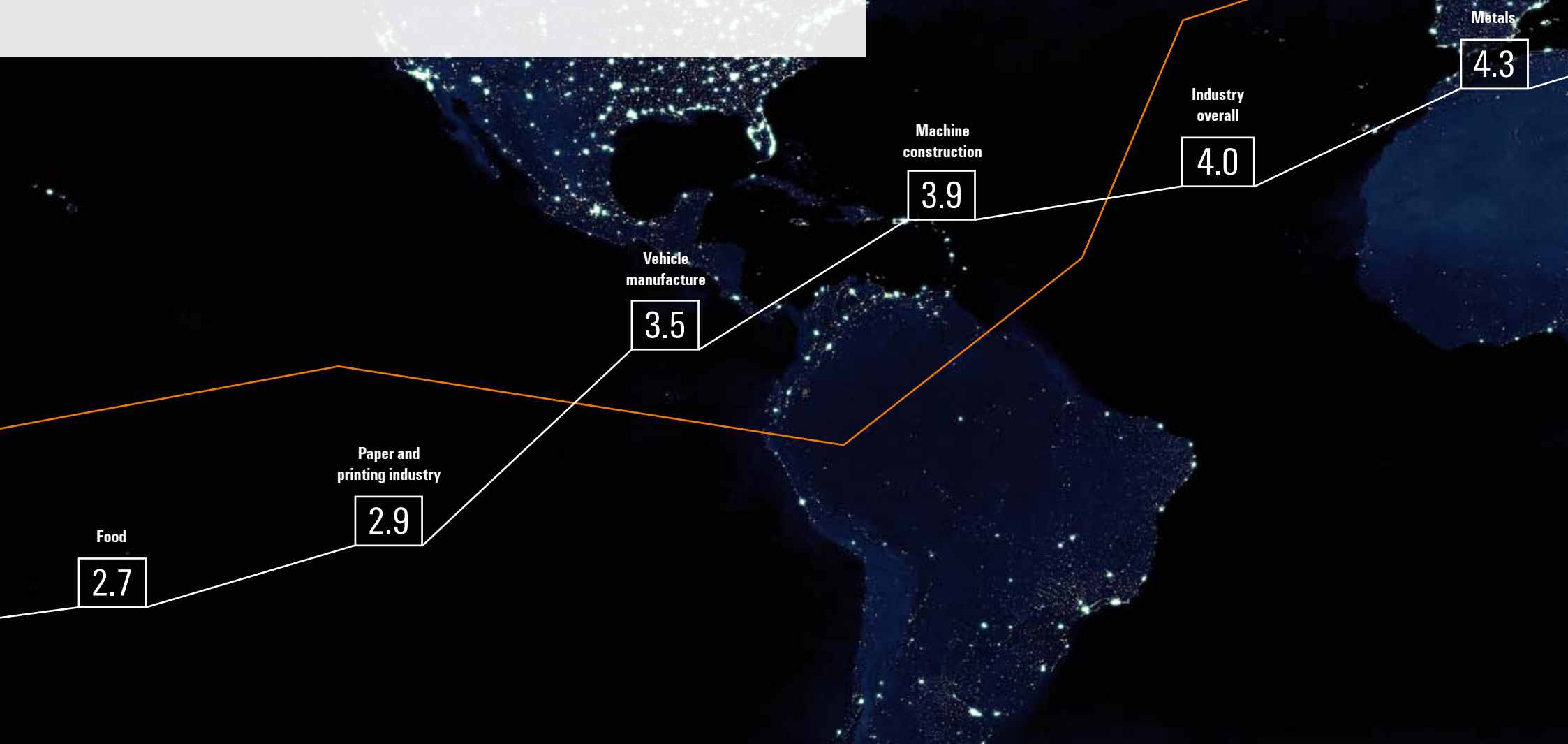# We are ensuring optimum connectivity
## Let's connect.

Device Manufacturers

**Weidmüller**

# How is the mega trend of urbanisation changing the industrial world?

Metals

4.3

Industry overall

4.0

Machine construction

3.9

Vehicle manufacture

3.5

Paper and printing industry

2.9

Food

2.7

**Electrical engineering**

5.1

**Chemicals**

4.5

Forecast for annual growth of global industrial
production by industry for 2011 to 2030
(as percentages)

Source: statista.com; VCI; Prognos AG 2012

# Networking between all aspects of life is on the rise
## System architectures are gaining in complexity

Globalisation is entering a new phase: as the emerging markets enter a boom period, there are more than 2 billion new consumers on the world market. At the same time, general mobility is increasing and resources are getting scarcer. Transport networks are becoming increasingly more complex and safety and facility availability requirements increasingly more demanding. This is speeding up the move to the next level of industrial automation. These effects are amplified by global urbanisation. Megacities integrate ecology, infrastructure and housing in a complex way. Flows of supplies, traffic, goods and communication therefore have to be controlled effectively. A constantly high level of safety, reliability and operability is needed – for everything from software and hardware to connections. Device manufacturers and system integrators, who intelligently network smart technologies and thereby safely control complex, system-wide processes, are not only making a key contribution to solving future challenges, but are also tapping into the accompanying potential for growth.

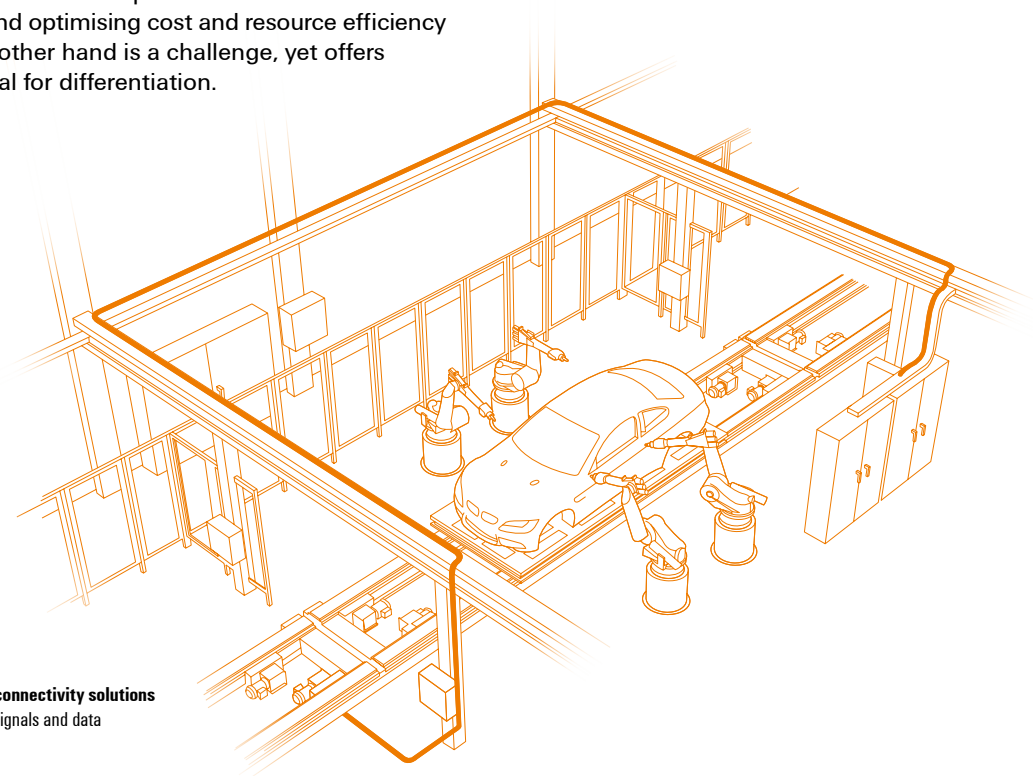# How will the market for device manufacturers develop in the long term?

# The real and virtual worlds are merging into one
## The change is marked by intelligent systems

In most industries, device manufacturers play a key technological role because they operate at the level at which hardware and software innovations for major system solutions are produced from extensive system know-how. Electronic devices – from sensors and control systems to actuators – in all industries therefore make up the central nervous system of networked processes – for example in production or building automation, energy technology or the process industry. When machines and products autonomously communicate with one another and with humans in the smart factories of the future, we will experience a huge change in all aspects of life, marked not just by increasing automation but more importantly by increasing complexity. Mastering these multi-layered processes and complex structures on the one hand and optimising cost and resource efficiency on the other hand is a challenge, yet offers potential for differentiation.



**Universal connectivity solutions**
for power, signals and data

# Going forwards together: Weidmüller – the competent partner for device manufacturers

**Europe**

422.5

383.8

**America**

267.2

209.5

**Africa**

3.9

2.8

**Asia/Australia**

841.3

621.5

# The age of digital production has already arrived
## Industry 4.0 is a realistic vision

The device manufacturer industry will focus on two issues in the future: digital production and Industry 4.0. Digital production involves the further development of industrial production, moving towards highly efficient, intelligent, company- and industry-wide processes. Industry 4.0 is the name given to the fourth industrial revolution driven by the Internet: production technology and IT merge into cyber-physical production systems in a smart factory. Automation systems automatically manage themselves, analyse processes and adapt themselves ideally.

When monitoring, controlling, regulating or automating processes, a reliable electrical connection for industrial devices is a link in the function chain that is not to be underestimated. As an industrial connectivity partner, Weidmüller supports the measurement, conversion and processing of power, signals and data with secure, intuitively operated interfaces and reliable connections. We are your partner as you progress to the future.

**Forecast of number of industrial robots by region around the globe in** ■ **2012 and** ☐ **2015 (in thousands)**

Source: statista.com; various sources (national robotics associations); IFR

# The big picture: excellent support from intelligent solutions

# Perfect connection solutions for devices in signal processing and power electronics

## We connect interfaces – the world over

As a leading provider and pioneer in device connection methods and housing technology, Weidmüller supports the structured cabling and connection of power, signals and data to automation technology devices in the electrical cabinet and in the field. Our worldwide Design-In Support combines custom services with application-based products for optimum solutions. For example, our OMNIMATE® device plug-in connectors represent an increase in the value of devices and efficient development and manufacturing processes with PCB terminals and plug-in connectors, feed-through terminals as well as electronics housings for industrial applications. Field-wiring components provide increased efficiency for wiring in the electrical cabinet or the field and when setting up a consistent network infrastructure. Connection solutions for Industrial Ethernet, sensor/actuator interfaces and cable assembly as well as heavy-duty plug-in connectors are the heart of industrial connectivity. Concentrate on the most important thing, your core competency. As your partner, we provide application-based and innovative connections.

# Always the best connection: we connect products and services for the optimum solution

Measurement technology
5

Energy and power generation
7

Medical technology and diagnostics
10

Drive technology
11

**Building systems
and technology**

21

**Automation
technology**

16

**Shares of the various segments on the industrial
electronics market around the globe (as percentages)**

Source: statista.com; ZVEI, 2010

# Increased efficiency
# over the entire life cycle
## Total cost of ownership

The increasing demands of technology, such as greater power
density in electronics, are challenges for engineering, but also
crucial factors for success in device application. Applications
featuring power electronics have tough development requirements
when functions for decentralised intelligence, control tasks,
security or communication have to be integrated in the interfaces,
and greater output has to be produced from smaller and smaller
designs.

We combine decades of experience with innovative technologies
to create connectivity concepts which can overcome conflicting
requirements in device design. For example, this means more
performance, plus integration of functions in smaller spaces
on the PCB and in the front panel. Through our design-to-cost
approach, in addition to component production costs, we are also
optimising efficiency in device design, in processing, assembly,
installation, operation, maintenance and environmental compatibility.
Viewed from this angle, our quality translates into plant availability
and system stability.

We are your partner as you progress towards the automated
world of the future. Let's connect.