

**PARAGON®**

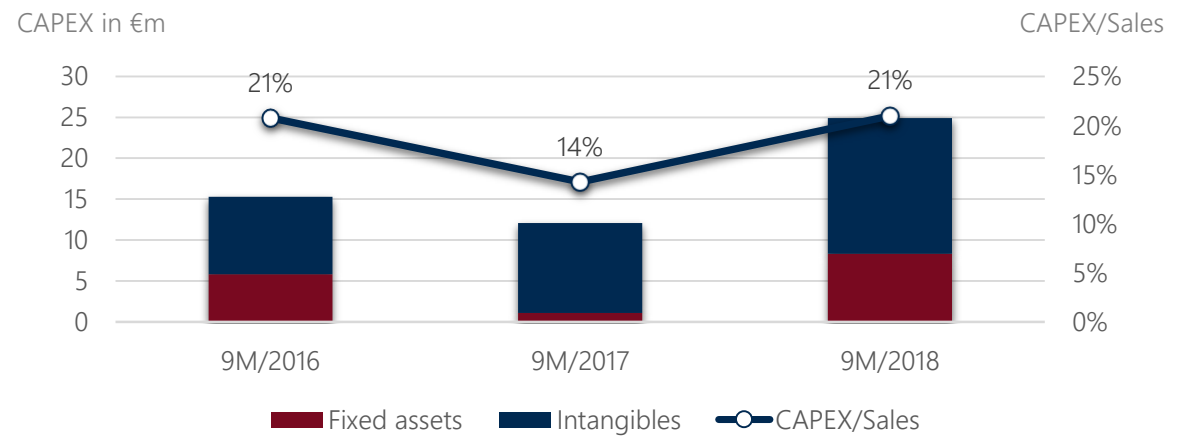
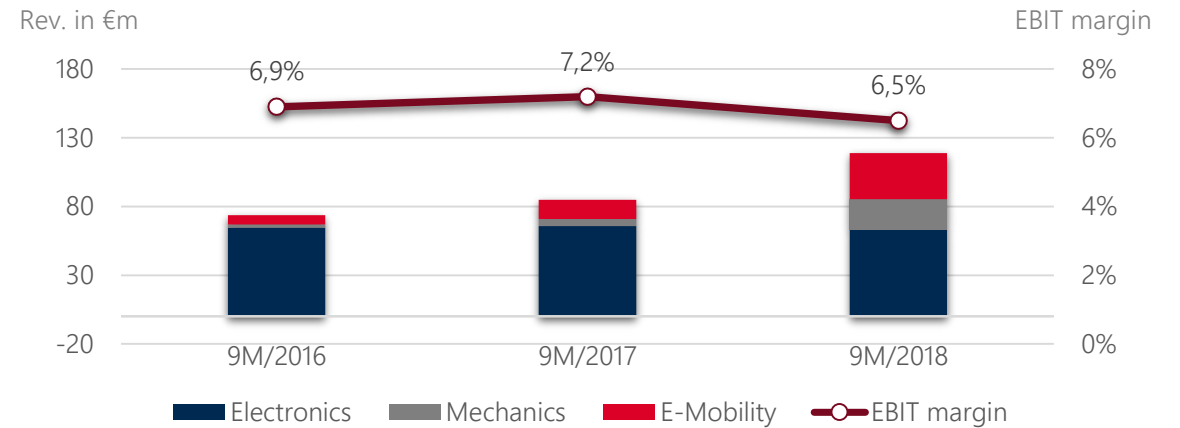


**paragon GmbH & Co. KGaA**  
**Investor / Analyst Presentation**

Eigenkapitalforum, Nov. 28, 2018

## Key aspects and successes from nine months 2018

- Continued top line growth +40%
- Automotive sector sales up 20%
- No significant influence of current problems in the automotive sector (Diesel scandal, WLTP issue, trade war China <> USA, ...)
- Main driver E-Mobility and Mechanics sales almost tripled
- Group EBIT margin of 6.5%
- CAPEX € 25m / Available liquidity € 73.5m
- Revenue and profitability outlook confirmed for FY 2018 (rev.: € 180-185m, EBIT margin 8%)



## Highlights



# Group in figures (as of Sep. 30, 2018)\*



Revenues:  
**€ 118.8m**

EBITDA:  
**€ 17.2m**

EBITDA margin:  
**14.5%**

EBIT:  
**€ 7.7m**

EBIT margin:  
**6.5%**

Market cap:\*\*  
**€ 169.1m**



Employees:\*\*\*  
**935**

Global footprint:  
**12 sites, 3 countries, 3 continents**



Foundation:  
**1988**

Founder & CEO:  
**Klaus Dieter Frers**



- 50% + 1 limited share held by Klaus Dieter Frers
- 50% - 1 limited share are in free float

\* Unaudited interim report 2018.

\*\* Xetra closing price as of Sep. 30, 2018.

\*\*\* Number at balance sheet date Sep. 30, 2018 (incl. 88 temporary workers).

## Corporate bond postponed

Summer 2018

- Bond market bullish
- Lower coupon envisioned
- 6 years term possible



Opportunity to optimize financial structure

Fall 2018

- Negative sentiment in financial market
- Bad news in automotive sector
- Sweeping judgement in regards of automotive

**Possible reaction:**

- Reduction of volume of bond
- Shorter terms
- Much higher coupon

- Not attractive for us
- No consequences expected
- Terms and structures of financing are oriented long-term and robust

## Financial status

Intended bond	Current financing
Refinancing of SemVox-acquisition	Done from other sources
Financing of growth in automotive	Expanded credit lines / leasing
Planned construction of buildings in Delbrück	Conventional real estate financing (H2/2019)
Refinancing of investment in real estate (Landsberg am Lech, Limbach-Kirkel)	Conventional real estate financing (favorable loan agreements ready for signing)
Further improvement of current financing structures	Not critical, but promising projects with banks and leasing companies
General corporate financing	Not critical

## Latest M&A activities

### New business unit “Digital Assistance”: SemVox GmbH (Saarbrücken, now: paragon semvox GmbH)

- Technologically leading software developer and technology supplier for proactive assistants based on AI and machine learning
- Developmental edge believed to be 3+ years
- In the future, the division will enable customers to develop their own intelligent assistants using the platform supplied by paragon
- Now beginning non-automotive business

#### Pioneer

First market launch of an empathic AI assistant - SemVox is the **leading B2B technology provider** for proactive, AI-based assistants

#### Technological depth

**Significantly greater functional scope** of SemVox technology than competitive solutions in the digital assistance market

#### USP

Unique combination of knowledge-based system and semantic representation of information (user <> background services)

#### Market penetration

Various orders from the German **automotive industry** have been received



#### Data control

All functions of the technology are **offered both embedded and cloud-based** - OEMs retain full control over the data

#### Perfect complement for paragon

SemVox **perfectly complements paragon's system provider approach**: OEMs get speech assistance systems from paragon as end-to-end solutions

## Latest M&A activities

**Acquisition of LPG Lautsprecher-Produktions-Gesellschaft mbH (Neu-Ulm, now: paragon electroacoustic GmbH) in order to expand the value chain in the Interior business unit and to enlarge the technology base for acoustics solutions.**

Close partner of  
various automobile manufacturers,  
such as BMW, Volkswagen, Opel and Rolls Royce  
**for many years**

LPG's external sound speakers  
address an **important**  
**safety aspect** in the  
mobility of tomorrow

The product portfolio mainly  
includes tweeters and cone  
loudspeakers that are used  
especially in the  
**automotive industry**



# Latest M&A activities of Voltabox



## Concurrent Design, Inc. (Austin, TX, USA)

- Engineering service provider with highly-skilled staff – facilitates development of complex battery systems



## ACCURATE SMART BATTERY SYSTEMS GmbH (Korntal-Münchingen)

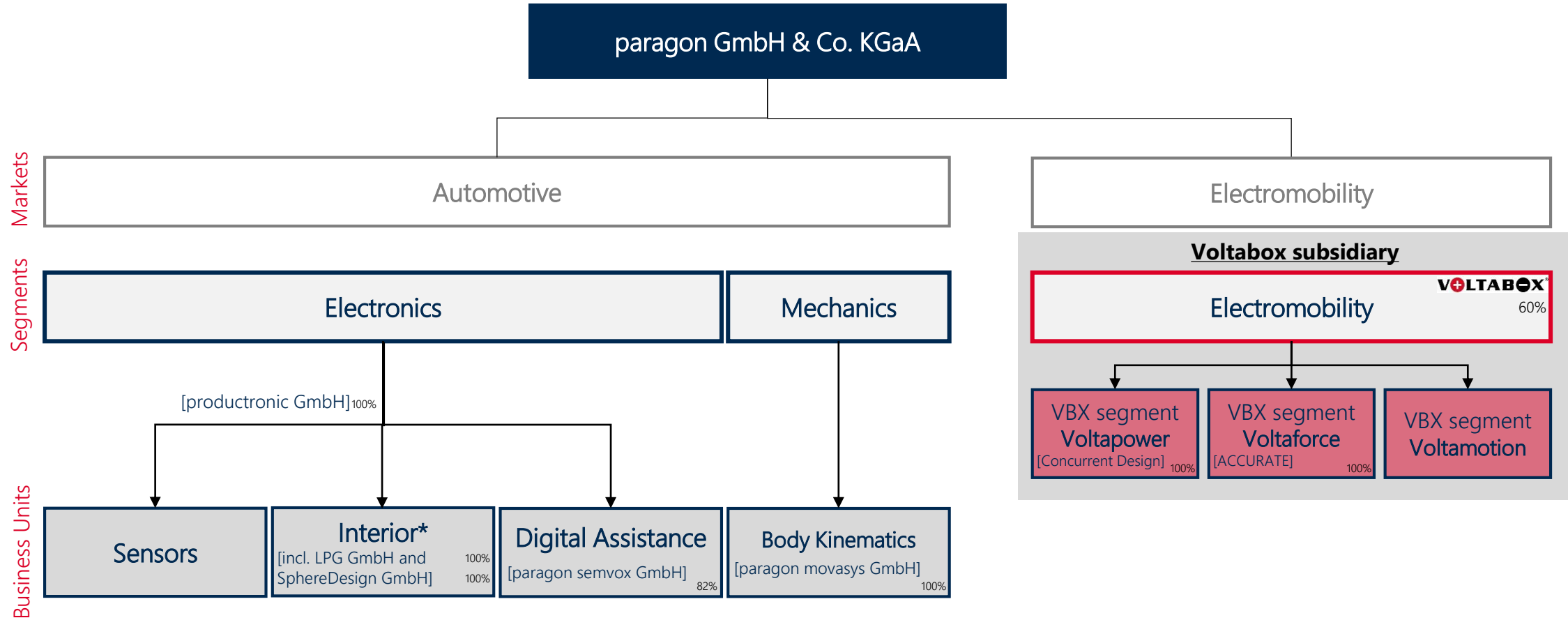
- Manufacturer of Li-Ion battery packs for several mass market applications (i.e. pedelecs) – facilitates horizontal diversification





Business overview

**Group structure**



\* Comprises former Cockpit and Acoustics business units.

## The paragon principle – business strategy

- \_ Growth strategy: early entry into high margin/fast growing market segments
- \_ Key technologies for and geared to megatrends
- \_ Interdisciplinary team of experts (electronics, mechanics, chemistry, production technology)
- \_ Pioneering and active product development
- \_ Excellence in mass production (high degree of automation)
- \_ Unique product portfolio and market position

### *Mission Statement*

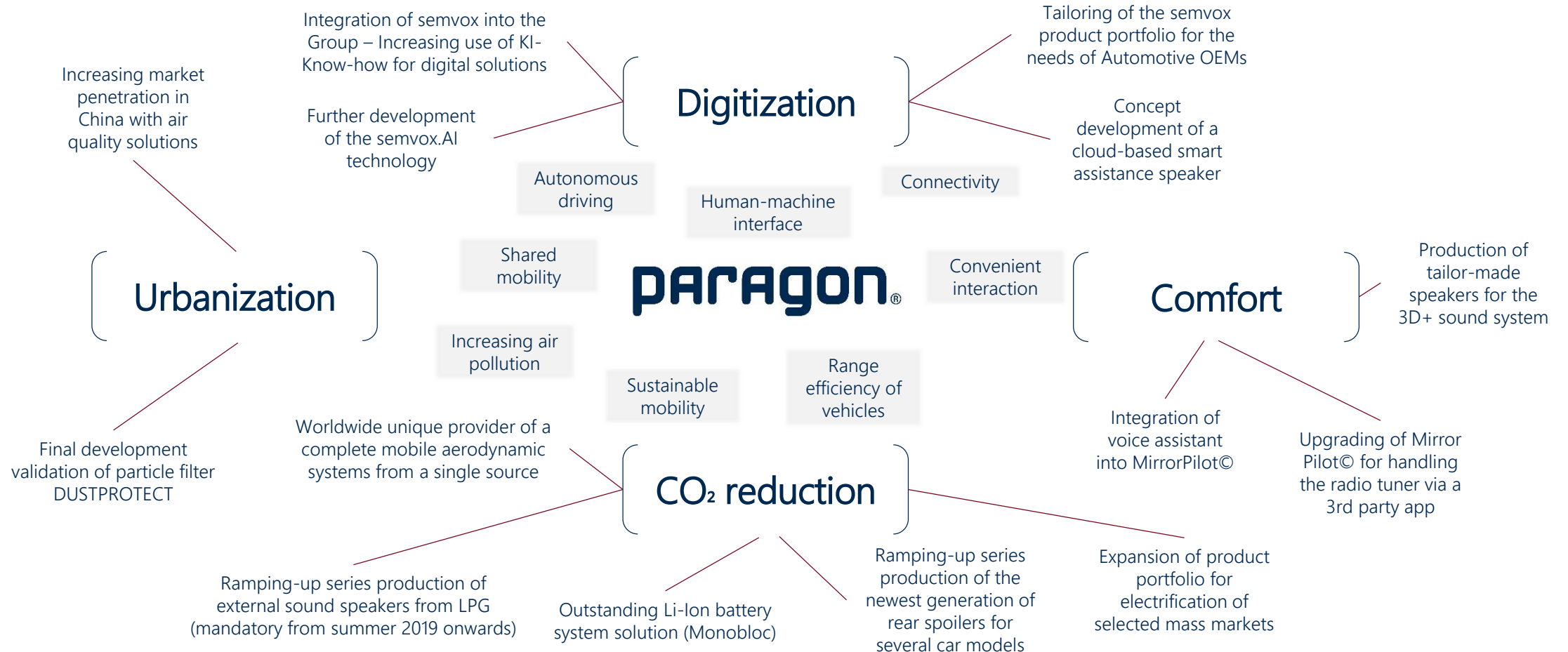
Early occupation  
of **high-margin** niches  
in **premium market**  
segments with  
**enabling technology**  
for existing **megatrends!**

# Established Tier1 partner

Selection of OEM customers:



# Push automotive mega trends



# Business unit Sensorics



**AQS® Air Quality Sensors**



**Particle Sensors (PM 2.5)  
DUSTDETECT**



**CO<sub>2</sub> Sensors**



**Electrical Particlefilters  
DUSTPROTECT**



**AQI®  
Ionair Air Improvement Systems**



**Odorifier Fragrance Systems**

Business overview

# Business unit Interior/Acoustics



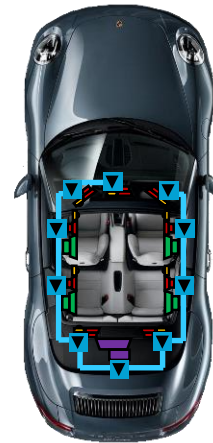
**belt-mic®**



**Soundsystems**



**Speechcontrol Microphones**



**In-car Communication**



**Noise Microphones**

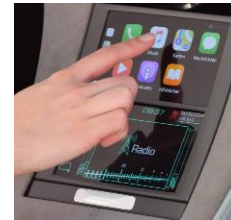
**Noise Suppression**

Business overview

# Business unit Interior/Cockpit



**Instrumentation**



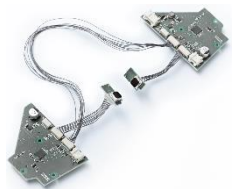
**MirrorPilot®**



**Wireless Charging**



**Car Sharing Modules**



**Touch Controls**



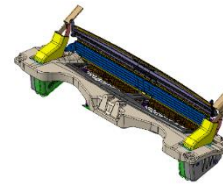
**Shift Paddles**

Business overview

**Business unit Body-Kinematics**



**Spoiler Systems**



**Kinematics**



**Windblockers**



**Interior Tables**



**Rolls Royce: Spirit of Ecstasy (Emily)**

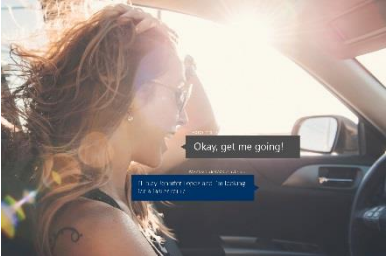


**Seat Cushion Adjusters**



Business overview

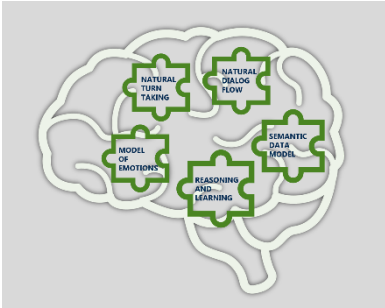
# Business unit Digital Assistance



**Embedded Speech Assistant**



**Hybrid Speech Assistance**



**KI based Interaction**

## Key figures I

Cost of materials ratio\*  
**at 56.4%**  
slightly increased  
(9M/2017: 52.7%)

- > Higher sales contribution of paragon movasys (with higher cost of materials ratio than Group average)
- > Lower share of development revenues in the Cockpit division

Personnel expense ratio  
**at 30.2%**  
remains stable  
(9M/2017: 30.4%)

EBITDA  
**up 36.3%**  
margin now 14.5%  
(9M/2017: 14.9%)

EBIT  
**up 25.4%**  
margin now 6.5%  
(9M/2017: 7.2%)

- > (Decreasing) ramp-up costs in Mechanics segment
- > Upfront personnel expenses in E-Mobility segment

Increasing profitability expected in Q4/2018

*\* Defined as: cost of materials / (revenues + changes in inventories).*

## Key figures II

### Equity ratio

solid at 53.8%

(Dec. 31, 2017: 56.8%)

### Operating cash flow

reduced to € -35.4m

(9M/2017: € -3.2m)

### Available liquidity\*

€ 73.5m

(Dec. 31, 2017: € 166.8m)

Sales financing support for main Voltabox partner (limited to FY 2018)

Increased inventory for ramping-up production

Subsequent to SemVox acquisition

*\* Defined as: cash and cash equivalents + unused credit lines with principal banks.*

## Key figures III

- Large increase in trade receivables owing to very good business development in the Voltapower segment and sales financing support for main Voltabox partner (limited to 2018)
- Increase in inventories enabling fast deliveries to the intralogistics market in the Electromobility segment
- One-time increase in cash flow from investing activities due to M&A (Concurrent Design, Accurate and SemVox)

Free  
Cashflow:  
€ -88.9m  
(Previous year:  
€ -16.0m)

€ -35.4m

(Previous year: € -3.2m)

Cash flow from  
operating activities\*

€ -53.5m

(Previous year: € -12.9m)

Cash flow from  
investment activities\*

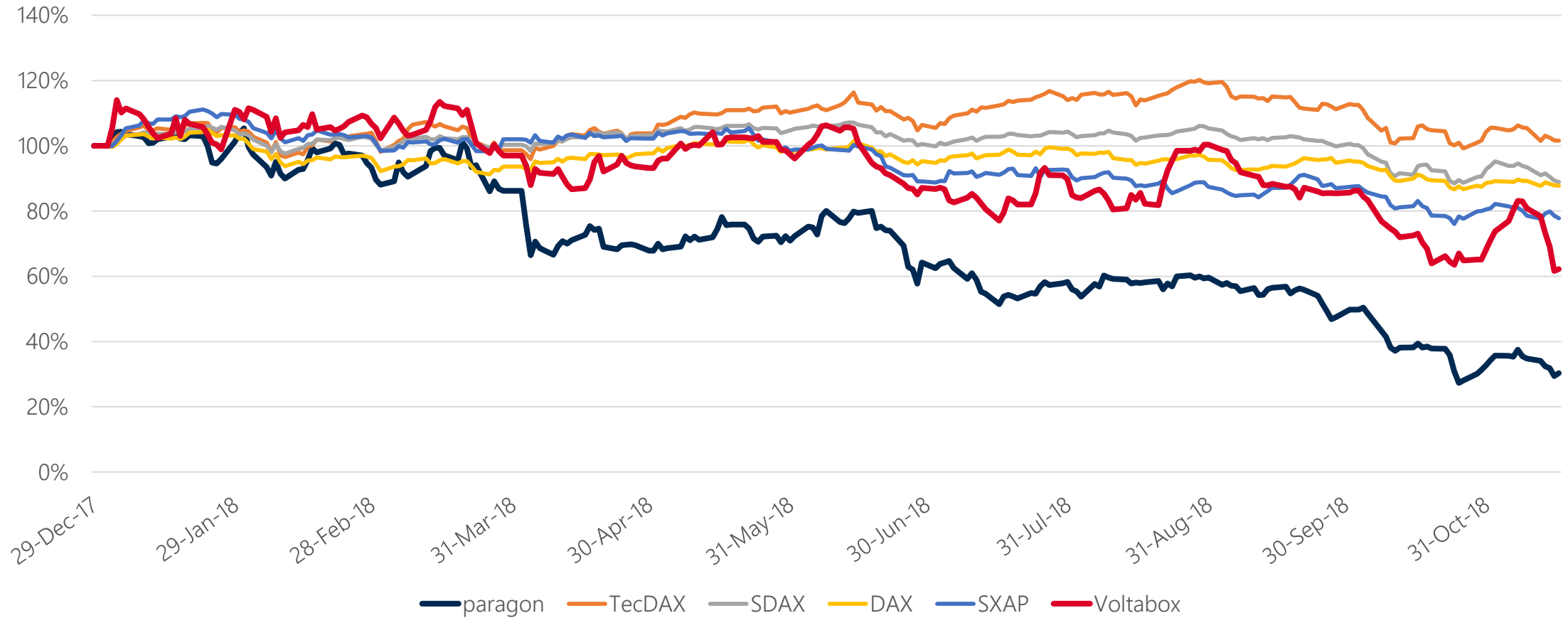
€ 8.2m

(Previous year: € 35.6m)

Cash flow from  
financing activities\*

\* 9M 2018.

# Share performance in 2018



# Market capitalization vs. company growth

2015		2018	
9m results 2015	Group Key Figures	9m results 2018	
€ 67.4m	<b>Revenues +76.4%</b>	€ 118.8m	
€ 4.6m	<b>EBIT +67.4%</b>	€ 7.7m	
6.8 %	<b>EBIT margin constant</b>	6.5 %	
€ 17.9m	<b>Equity +895%</b>	€ 178.2m	
20.7 %	<b>Equity ratio +160%</b>	53.8 %	
€ 34.5m	<b>Net debt -36.2%</b>	€ 22.0m	
€ 86.4m	<b>Total assets +283%</b>	€ 331.0m	

\* Adjusted to 10% capital increase in Q4/2016.

# Market capitalization vs. company growth



9m results 2015**	Group Key Figures	9m results 2018***
€ 6.6m	<b>Operating cash flow</b>	€ -35.4m
€ 18.7m	<b>Free cash flow</b>	€ -88.9m
€ 0.7m	<b>Net Working Capital</b>	€ -47.4m
€ 3.2m	<i>thereof Receivables,</i>	€ -25.0m ( <i>huge sales increase 2018, Triathlon 2018-terms****</i> )
€ -9.5m	<i>Inventory and</i>	€ -27.9m ( <i>see other page</i> )
€ 7.1 m	<i>Liabilities</i>	€ 5.4m
€ -24.0m	<b>+CAPEX</b>	€ -24.9m
€ -1.2m	<b>+M&amp;A</b>	€ -28.6m

\* Adjusted to 10% capital increase in Q4/2016.  
 \*\* From 31.12.2014 to 30.09.2015.  
 \*\*\* From 31.12.2017 to 30.09.2018.  
 \*\*\*\* One-time effect.

# Market capitalization vs. company growth



thereof	Inventory increased from 31.12.2017 to 30.11.2018	€ 27.9m
<i>paragon / productronic / Kunshan</i>	<i>Circulation of packages (€ 0.2m) and toolings (€ 0.7m), product launches in China (€ 0.1m)</i>	€ 1.2m
	<i>Preproduction i.a. due to reconstruction of microphone line</i>	€ 4.4m
<i>paragon movasys</i>	<i>Product launch AMG/Porsche (€ 2m), storage of discontinued material (€ 0.6m), Preproduction due to relocation (€ 1.6m), first consolidation of finished goods at HS Genion (€ 2.5m*)</i>	€ 8.8m
<i>Voltabox</i>	<i>Increased inventory (mainly cells € 5.0m, orders from Komatsu/Kiepe € 0.9m), building inventory of finished goods for intralogistics (€ 6.4m)</i>	€ 12.5m
<i>ACCURATE</i>	<i>First consolidation after acquisition, small sales contribution</i>	€ 0.9m
	<b>One-time effect</b>	<b>€ 26.1m</b>

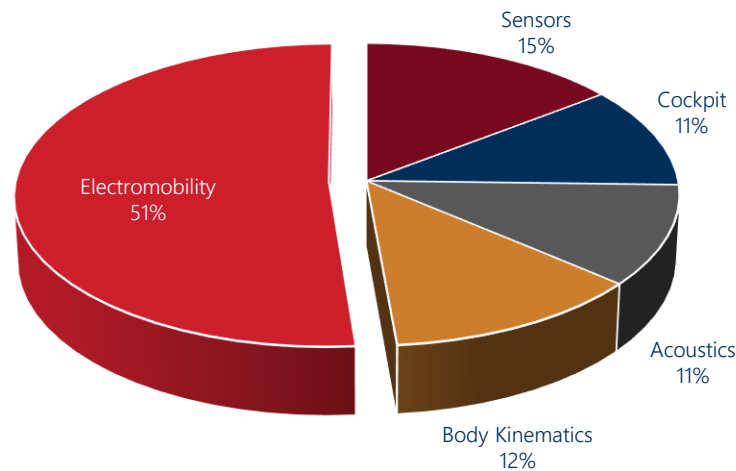
\* First consolidation of other inventory of HS Genion on 31.12.2017 (€ 5.5m).



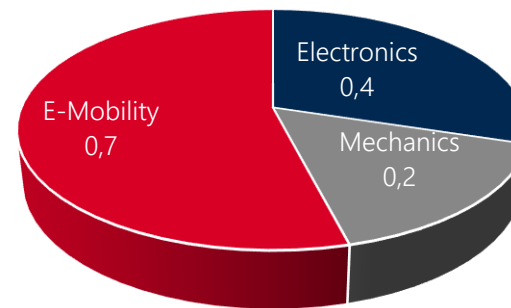
Financials

# 60-months order backlog

60-months order backlog  
(€ 2bn) as of June 30, 2018 by  
segments/units



60-months order backlog  
with 100% weighting as of  
June 30, 2018 [in €bn]



- Approx. € 2bn total 60-month order backlog (H1/2017: € 1.6bn)
  - Estimated order backlog is weighted according to the expected lifetime and the probability of occurrence
  - Serves as base for planning
  - Evaluation system in place since IPO in FY 2000
- Thereof approx. € 1bn attributable to Voltabox (H1/2017: € 0.8bn)

# Current forecast

PGN	Result 2017	Year-to-date/	Forecast 2018	
	12 Months	H1/2018	As of Mar. 9, 2018	As of Aug. 21, 2018
Group revenue	€ 124.8m	€ 78.6m	Approx. € 175m	€ 180 – 185m
EBIT margin (unadjusted)	6.1%	6.1%	Approx. 9%	Approx. 8%*
Investments	€ 37.7m	€ 15.9m	Approx. € 35m	Approx. € 35m

VBX	Result 2017	Year-to-date/	Forecast 2018	
	12 Months	H1/2018	As of Mar. 9, 2018	As of Aug. 21, 2018
Group revenue	€ 27.3m	€ 18.1m	Approx. € 60m	€ 65m – € 70m
EBIT margin	2.1%	0.6%	Approx. 10%	Approx. 7%*
Investments	€ 6.3m	€ 3.5m	Approx. € 13.4m	Approx. € 13.4m

\* Considering € 2m add. expenses from rearrangement of intralogistics partner agreement.

## Shifting from component to system provider



## Summary

Much faster growth than automotive sector

paragon Automotive +20%

- Increasing disengagement of sector constraints
- No additional risks seen coming from e.g. US politics, Diesel scandal, WLTP bottlenecks

Robust order backlog

€ 2bn. (60 months)

- Thereof € 1.3bn. weighted with 100% (signed orders and framework agreements)

Significant growth in E-Mobility and Mechanics with economies of scale driving profitability

Operating leverage

- Upfront CAPEX (development and PP&E) facilitate sustainable profitability



**PARAGON®**

**Thank you for your time!**

**paragon GmbH & Co. KGaA**

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*Note: this presentation was printed climate neutral*

