Lighting and electronics that fit every RV vision

From standard to customized solutions:
one partner for every lighting and electronics concept and budget

Words Peter Hirtschulz

FORVIA HELLA is setting new standards in caravan and motorhome lighting and electronics by combining proven standard products with fully customized solutions. As OEMs face higher design expectations, shorter development cycles, and tight cost targets, they need scalable technology without compromises. Drawing on decades of automotive lighting expertise, FORVIA HELLA brings compact, robust LED systems, modular rear concepts, agile engineering and electronics solutions to the recreational vehicle segment – helping manufacturers differentiate fast, optimize cost, and maintain a consistent brand look across model lines and price points. Aboutcamp BtoB spoke to Andreas Reitz, Sales Director for the Advanced Technologies and Specialty Vehicles segments at FORVIA HELLA.

Aboutcamp BtoB – How is FORVIA HELLA positioned in the RV market?
Andreas Reitz – We act as an end to end lighting and electronics partner. That means offering ready to use standard products for fast and cost efficient integration, as well as semi- and fully customized solutions tailored to specific styling, design and functional requirements. With a global footprint, FORVIA HELLA enables flexible industrialization across regions – supporting specific customer and project requirements. The result is consistent quality at the right cost level for each vehicle class.

IBS sensor

Linear actuator

Aboutcamp BtoB – What does the portfolio breadth look like in practice?
Andreas Reitz – Usually two tracks. First, standard modules that OEMs can deploy quickly with usually minimal engineering effort. Second, customized developments where we adapt optics, appearance, and functions to the customer's brief. Beyond lighting, we also cover electronics functions increasingly relevant to modern RV architectures – from intelligent battery sensors for precise 12 V and 24 V energy monitoring to actuator solutions, covering linear actuators, locking actuators, rotatory actuators for high forces and rotatory smart actuators for 360° angle. These solutions can support applications where controlled movement, secure locking and compact integration matter, for example in access, flap or positioning functions. This allows OEMs to source complementary electronics expertise from a single partner and align functionality with their vehicle concept.

Aboutcamp BtoB – How do you differentiate versus competitors?
Andreas Reitz – Flexibility, scalability, and innovation. We reuse proven optical technologies and electronics to shorten lead times and reduce risk, while scaling production across our locations. Our engineering teams can vary specification levels – from quick styling upgrades to more extensive re engineering – ensuring customers get exactly the scope they need, not more, not less. This engineering depth, combined with our global supply base, enables a level of flexibility and efficiency that is hard to replicate.

Aboutcamp BtoB – Can you share product examples?
Andreas Reitz – A good example for innovation is SignalFlex, our modular EdgeLight concept that enables a high degree of design freedom for the rear lighting: modules can be arranged horizontally or vertically to create a floating, homogeneous light signature. The system integrates tail, stop and direction indicator functions within modular light chains including a dedicated lighting control unit and enables a high degree of design flexibility, including different mounting depths for additional styling accents. Based on a proven module platform, it combines multivoltage capability and IP-rated robustness with low investment requirements. Direct mounting without additional lens or housing reduces integration effort and supports cost-efficient customization, while the reuse of established components also contributes to improved sustainability.

SignalFlex

Aboutcamp BtoB – You recently brought the LeanLED II combination lamp onto the market – can you tell us more about this?
Andreas Reitz – On the customer side, we collaborated with Adria on a rear lamp appearance upgrade from red to grey, aligning with automotive trends toward hidden, "black edition" looks while retaining all functions and homologation – fast to implement, big visual impact. And for a price sensitive program we engineered a low cost customized lamp with approximately 66 % lower unit cost - clear evidence that customization remains feasible when it is designed for cost from day one. For standard solutions, LeanLED II is a compact combined lamp family with 33 variants. It delivers a homogeneous signature using Glowing-Body and EdgeLight optics, and now adds an integrated reversing light and reflex reflector on the rear version. Series production is running in Derabassi, India – ideal for robust, cost-efficient platforms.

Aboutcamp BtoB – How do you adapt to different needs and price points?
Andreas Reitz – We start with the customer's constraints – signature intent, space, homologation, and target piece price. Then we propose a path: standard module, semi customized (appearance or packaging change), or full customized. Customer specification, manufacturing location, component reuse, and optical architecture are main levers to hit cost, weight, and timing. This staged approach avoids over engineering and keeps investments proportionate to the business case.

Aboutcamp BtoB – What are the key benefits for OEMs?
Andreas Reitz – The key benefits for OEMs are efficiency, flexibility and design freedom. Efficiency comes from reusing validated module platforms and transferring proven passenger-car technologies into the RV segment – supported by global industrialization to achieve the right cost level. Flexibility is driven by modular optics and a scalable engineering approach, ranging from quick styling upgrades to fully customized developments. And design freedom is enabled by homogeneous, brand-distinct light signatures that fit limited installation spaces, while maintaining strong light output and thermal performance – always aligned with cost and durability requirements in real RV applications.

Aboutcamp BtoB – What's next – any news you can share?
Andreas Reitz – We're preparing a new front Lighting Kit for compact installations. Building on the proven modularity of the 90 mm modules, the new FORVIA HELLA Lighting Kit marks the next step toward even greater flexibility and integration. With an ultra compact design and high energy efficiency, it is tailored for modern RV front end concepts. With the new FORVIA HELLA Lighting Kit the iconic 90 mm design gets a revolutionary twist: Stay tuned for a completely new design and multiple lighting possibilities. Symmetrical or Asymmetrical beam patterns, low beam, high beam, Bi-LED and high-performance precisely aligned to On- or Off-Highway requirements.

LeanLED II