Urbanisation and the transformation of the way of working and living in the 21st century places new demands for public transport. The vehicle infrastructure for passenger information, passenger counting, ticketing, etc. must be flexible, always available and cost-efficient. The need for new functions such as the occupancy rate and display of the passenger load poses new challenges to transport agencies at ever shorter intervals.

In order to enable the quick installation of the necessary equipment as well as the ability to make upgrades quickly, easily and independently of manufacturers and brands, the Verband deutscher Verkehrsunternehmen e. V. (VDV) [Association of German Transport Companies] presented the new standard IBIS-IP in their publication VDV301. This standard, the first version of which was released in mid-2014, significantly simplifies the structure of the system in vehicles. Since that time, the development of IBIS-IP has been pushed forward by a dedicated working team. Along with other well-known manufacturers, iris-GmbH is part of this team. As a result, version 2.0 of IBIS-IP is now available on the market.

**IBIS-IP ready! The standard for the future:**

- Service-oriented protocol - the devices provide each other with information required for operation
- Push operation for counting data (if subscribed to)
- No hierarchies – no on-board computer required
- Interoperability among IBIS-IP devices of different manufacturers ensures flexibility in hardware deployment and independence in component selection
- Open XML structure, well-defined XSD schemas as a solid basis for development
- Remote updates of firmware and configuration are possible
- SNMP improves maintainability and system monitoring (not yet standard)
- The services provide information for all applications in the vehicle (e.g. position data)
- Using Ethernet standard interfaces avoids additional work and expenses for linking IBIS-IP devices