eHZ-B

Smart Electricity Meter
compliant with FNN base meter requirements

Bringing Itron's expertise in smart metering rollouts to the German market, eHZ-B is the latest addition to Itron's 3.HZ FNN base meter compliant portfolio. Dedicated to residential use, eHZ-B is a smart electricity meter with standardized plug-in design facilitating installation on the field. Itron's eHZ-B digital capabilities feature future-looking layers of security, to help utilities and cities transition safely to a smart and connected distribution network, laying the foundation for flexible energy demand-response.

EHZ-B ENSURES COMPLIANCE WITH FNN SPECIFICATIONS

Addition to Itron's portfolio of 3.HZ meters, eHZ-B is the latest variant of the family, delivering well-established compliance with FNN standards for base meters. Suitable for easy connection to the Smart Meters Gateway (SMGw), eHZ-B meters blend Itron's quality, accuracy, and performance in a compact form factor for effortless installation.

EHZ-B PROTECTS DIGITAL TRANSMISSIONS

Communicating to Smart Meters Gateway (SMGw) through TLS-encryption, eHZ-B is able to work with all required and optional defined cipher suites and curve parameters for communication via LMN (BSI TR-03116-3 Issue:2020).

EHZ-B INTEGRATES WITH MULTI-VENDOR SYSTEMS

Smart and connected, Itron's eHZ-B electricity meters are interoperable with industry standards, such as the FNN requirements for wired LMN protocols. At the cornerstone of modernization and digitalization initiatives, eHz-B delivers constant data feedback from the network and seamlessly integrates with established communication protocols.

EHZ-B IS BUILT BY EXPERTS

With over 200 million devices deployed and millions of smart meters in Europe alone, Itron is a trusted partner for customers to ensure successful rollouts, at scale. From tender and logistics through project deployment and ongoing support, Itron has regional manufacturing structures across the E.U., and a global supply chain reach to ensure continuity and effectiveness of your smart meter rollout.

FEATURES

» Low Power Consumption of <0.35W per phase

» FNN base meter Compliant

» Interoperable with industry protocols and other vendors in the Smart Meters Gateway (SMGw)

» Supporting all currently required or optional recommended cipher suites and curve parameters for TLS-encryption

» Double tariff version (optional)

» Grid data (optional)

Technical Specifications

Base meter

Meter type	Electronic poly-phase meter in plug-in technology (eHZ)
Standard	DIN EN 50470-1; DIN EN 50470-3, DIN VDE 0418-3-6, IEC 62052-31:2015/ISH1:2019
Network	3-phase/4-wire (optionally also for connection as 1-phase/2-wire meter)
Measured quantites	Active energy in one or two energy directions
Accuracy	Class A (optional: B)
Nominal voltage UN	3 x 230/400 V
Nominal frequency	50 Hz
Operating voltage range	-20 %... + 15 % of UN
Current range Imin- Iref(Imax)	0,25-5(60) A;
Power consumption	< 0.35 W per phase (typical)
Operating temperature range	-25°C to +55°C
Temperature range for storage and transport	-40°C to +70°C
Protection class	IP51

Tariff capability
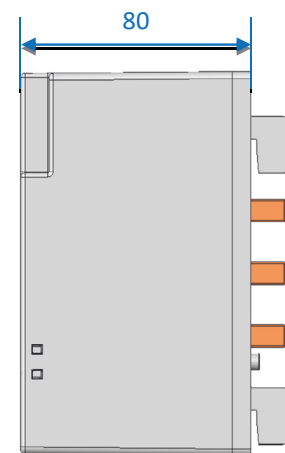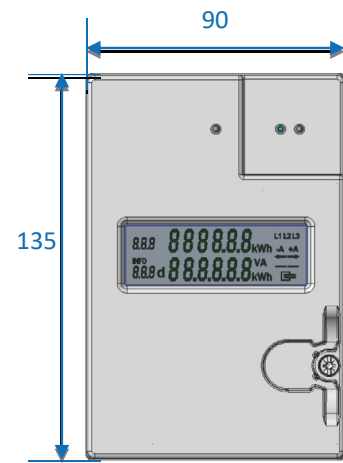
Tarification	Single tariff (standard) Double tariff (optional) with control via LMN interface
Customer information register (with PIN protection)	Value(s) for +A and/or -A of the last 24h (1d), 7x24h (7d), 30x24h (30d) and 365x24h (365d) each for up to 730 days; value(s) for +A and/or -A since self-selected start time
Grid data (optional)	Voltage per phase, current per phase, power per phase, total power, frequency, phase angle U-U and U-I
Display	LCD with 7-segment elements and special characters

Communication

Info interface	Front IR interface, uni-directional, 9600 Baud, protocol SML
LMN interface	Interface 1x Optical LMN interface, 921.6 kBit/s, protocol SML unencrypted and TLS 1.2 encrypted, HDLC,SML
LMN radio module (optional)	Integrated inside the meter for wireless connection to gateways

Further features

Tamper detection	Magnetic field sensor (number of attacks, duration and energy consumption during field exposure), sealing pin opening contact
Additional information	Logbook with up to 100 entries

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