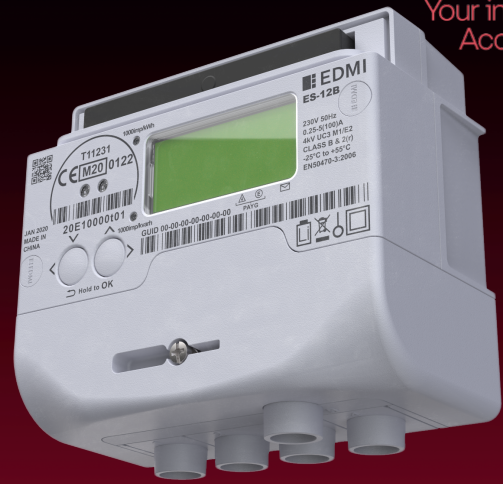


Cost-effective and space-efficient antenna for smart meters



SEE OUR INNOVATION IN ACTION

THE COMPANY

EDMI is a global leader in the provisioning of smart metering solutions. They are committed to delivering high-quality, reliable products and services globally. They are dedicated to offering end-to-end smart metering solutions that assist customers in overcoming the obstacles faced in the digital transformation in the energy industry. Headquartered in Singapore, EDM I has been at the forefront of the industry for more than 40 years. EDM I is owned by Osaki Electric Co., Ltd, a leading Japanese metering solutions provider.



THE CHALLENGE

To design an RF device inside the confines of a Smart Meter with all the high voltage, high current electronics surrounding it and to achieve the optimal RF performance is not a trivial task. Keeping the devices from being affected by the power electronics is the first challenge. In addition, the electro-mechanical emission of the RF device must not impact the accuracy of the meter. Working together, Ignion and EDM I, were able to address these challenges.

THE SOLUTION

EDMI and Ignion have collaborated using the DUO mXTEND™ component integrated into EDM I’s RF Mesh Network Interface Card operating in 900MHz and 2.4GHz frequency bands. The measured performance is comparable to using an external SMA connector paddle antenna but with the advantages of space-saving and cost-effectiveness.

“Ignion’s antenna technology is groundbreaking; couple that with their exemplary technical support provided, EDM I will look to Ignion for our future RF solutions.”

Mark Foo, Assistant Vice President, EDM I Limited.

ACHIEVEMENTS

Fast one-week turnaround to work on RF matching circuit.

Two frequencies with one component 900MHz and 2.4GHz.

Achieved optimal RF performance on the first iteration.