The **DLMS Generic Companion Profiles (GCPs)** represent the next stage of compatibility, designed to simplify operations and ensure seamless integration across devices and systems. The **RDI GCP** offers a **standardized framework for legally metrology-relevant communication between smart meters and remote displays**. This profile provides an industry-standard implementation of DLMS/COSEM, ensuring secure and reliable data exchange. By adopting the DLMS RDI GCP, organizations can **overcome regulatory complexities and enhance consumer engagement** by providing legally recognized, real-time energy consumption data.

RDI (Remote Display Interface) GCP Overview

The RDI GCP enables **secure, metrology-relevant communication between smart meters and external displays**, facilitating a new approach to energy awareness. Designed to comply with legal metrology requirements, the profile ensures that consumers can **access real-time, legally recognized consumption data beyond traditional in-meter displays**. This allows for greater flexibility in managing innovative tariff structures, promoting energy efficiency, and supporting decarbonization goals.

Addressing Industry Challenges with RDI GCP

The energy sector is evolving, with increasing regulatory complexities and the need for greater consumer awareness. Traditional smart meter displays are limited in their ability to present complex consumption profiles and new contract models. Additionally, compliance with the Measuring Instruments Directive (MID) often restricts recognition to meter display readings. The RDI GCP solves these challenges by introducing a standardized, legally metrology-relevant display solution that ensures secure and authenticated access to metrological data, fostering consumer engagement and supporting better grid management.

KEY BENEFITS

Legally Recognized Data Access: Provides metrology-relevant data beyond traditional meter displays, ensuring compliance with legal metrology standards.

Secure and Standardized Communication: Leverages DLMS/COSEM for authenticated, reliable data exchange between smart meters and remote displays.

Enhanced Consumer Awareness: Offers real-time visibility into energy consumption, promoting energy-efficient behavior and reducing bills.

Regulatory Compliance: Addresses regulatory challenges by providing a legally compliant method of displaying smart meter data remotely.

Future-Ready Design: Supports innovative tariff structures and flexible energy management, contributing to decarbonization efforts and better grid stability.

Highlighting the Main Use Cases

1 Device Pairing and Additional Commissioning Requirements

Secure onboarding and authentication of remote displays

2 Receiving Metrological Data

Ensuring secure data access and integrity

3 Notification of Events and Alarms

Providing real-time alerts for energy usage and system events

4 Control of Disconnection Unit (Two-Way)

Enabling bidirectional control for enhanced grid management and consumer empowerment

5 Chain2 Support

Reduces data package size using compact data objects, enabling multi-purpose server ports and ensuring correct interpretation with periodic descriptor messages.