

# GRIDSCALE X™

## Flexibility Manager

Flexibility Manager ([www.siemens.com/gridscalex](http://www.siemens.com/gridscalex)) is a modern Cloud Service that enables Operational Planners to predict, detect, and prevent grid congestions by leveraging flexible resources, enabling Grid Operators in Scaling Capacity of existing infrastructure, Optimizing Grid Expansion investments and Accelerating Capacity Expansion for new connection requests.

This Specific Documentation for Gridscale X Flexibility Manager sets forth and amends the General Documentation for Gridscale X Cloud Services solely with regard to the Cloud Services of Gridscale X Flexibility Manager (“Flexibility Manager”).

### Specific Documentation

#### General

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##### Value Proposition

Gridscale X Flexibility Manager empowers distribution system operators to detect, predict, and mitigate grid congestion through advanced analytics and automated flexibility management, delivering value in key areas:

1. **Scale Grid Capacity:** Enhance the capacity of existing infrastructure by detecting and predicting grid congestions in advance and automatically proposing tailored solutions such as curtailment plans, activation of Flexible Connection Agreements, Bilateral Contracts to prevent constraints while ensuring operational stability.
2. **Operational Stability.** Improve Operational awareness on future congested areas, prevent congestions from happening and reduce reactive and stressful situations on grid real-time operations.
3. **Extend Grid Life** – avoid equipment overload, and therefore equipment failures due to continuous operation under stress. Use grid and flexible assets to overcome possible congestions, extending the life of equipment
4. **Enable Investments Optimization:** Defer and optimize grid expansion investments by leveraging flexibility to resolve grid constraints dynamically. The platform identifies congestion risks through hours-ahead simulations and offers a ranked set of actions to prevent them, optimizing the need for costly and time-consuming infrastructure upgrades while maximizing asset utilization.
5. **Reduce Connection Waiting Times:** Dynamically manage flexible connection agreements to unlock additional grid capacity from existing infrastructure. By automating the activation of flexibility when needed, Flexibility Manager enables grid operators to significantly reduce grid connection request waiting times, accelerating the integration of new

distributed energy resources without waiting for infrastructure investments.

## Packages

**Service Delivery Point equivalent (SDPeq)** For Flexibility Manager Service Delivery Point equivalents (SDPeq) are used as main entitlement metric for the SaaS subscription. SDPeq can be approximated based on number of HV and MV.

**Modeled Flexibility Add-On to Subscription Packages (Tiers)** In addition to the Subscription Packages (Tiers) defined in the General Documentation for Gridscale X Cloud Services, for Flexibility Manager there is an additional Modeled Flexibility subscription component. Modeled Flexibility is defined as the sum of Nominal Active Power (in MW) of all Flexible Assets modeled in Gridscale X Flexibility Manager.

**Packages** The packages in the table below have limits that apply for the entire Subscription Term, unless expressly indicated as “monthly” limit.

<b>Package</b>	<b>Tier 1</b>	<b>Tier 2 (Not Released)</b>	<b>Tier 3 (Not Released)</b>
Included SDPeq	300.000	600.000	1.200.000
Included Modeled Flexibility	25 MW	25 MW	25 MW
<b>Upgrade Packages</b>			
Additional SDPeq	50.000	50.000	50.000

In addition to the Tier Packages reported above, there is an additional subscription component scaling with the amount of Modeled Flexibility.

## Limitations

API Limits, as well as other Prerequisites included in Gridscale X Flexibility Manager Cloud Services will be provided by Siemens upon contract signature.

## Specific Terms

**Use Restriction** Customer acknowledges that insights provided by Flexibility Manager are limited to the grid model based on the data, connectivity information, mapping of entities and telemetry provided by the Customer and results may not fully correspond to the real-world situation. The interpretation, implementation and utilization of reports, results of congestion forecast simulation and proposed solutions is the sole responsibility of the Customer. Siemens does not assume any liability, warranty, or guarantee for the feasibility or usability of reports, results of congestion forecast simulation and proposed solutions, nor for

actions or omissions based on the reports, concepts, proposals or recommendations.

Flexibility Manager may despite all the quality assurance measures in rare cases erroneously output wrong or untimely values or commands. The customer must take appropriate safety measure to prevent harm.

Requirements for protection measures on field level must be clearly communicated to network operators.