

TEKTELIC
c o m m u n i c a t i o n s

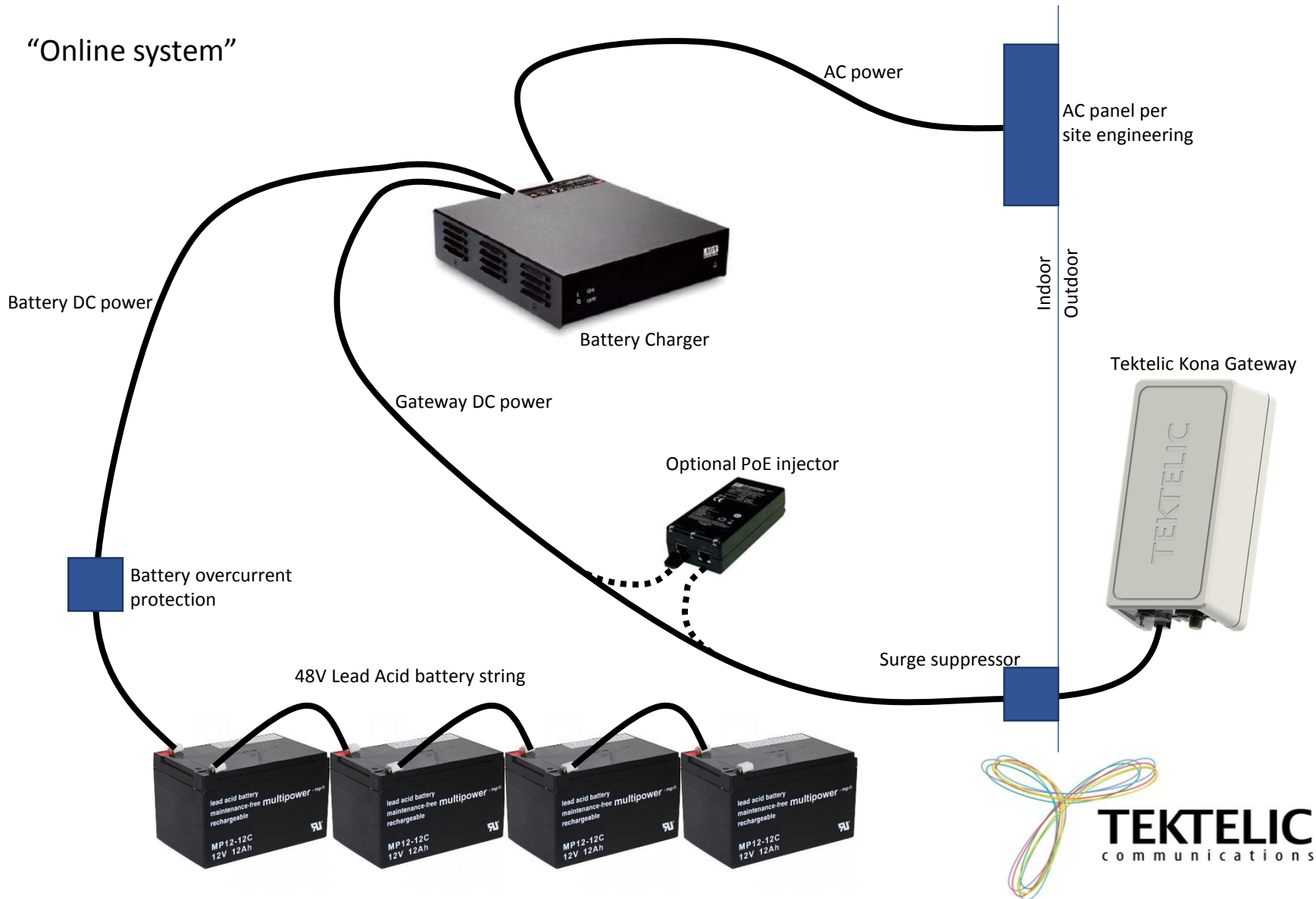
Kona Gateway Battery Back-up Powering Guide

Kona Gateway DC Power Specifications

Gateway	DC Power Input Specifications
Kona Mega	<p>Operating voltage: 37 – 57 Vdc No damage voltage: +/-60 Vdc Shutdown threshold: 33 V typical, 31 V minimum Start-up threshold: 39 V typical, 42 V maximum Power consumption: 24 W typical, 40 W maximum Ground reference: Positive or negative</p>
Kona Macro	<p>Operating voltage: 37 – 57 Vdc No damage voltage: +/-60 Vdc Shutdown threshold: 32 V typical, 30 V minimum Start-up threshold: 36 V typical, 37 V maximum Power consumption: 15 W typical, 25 W maximum Ground reference: Positive or negative</p>



Indoor Battery Backed System



Battery Charger

- On line system, simultaneously powers Gateway and charges batteries as needed
- Configure for recommended 48V AGM Lead Acid battery system
- Recommended part:
 - Mean Well model ENC-120-48
<http://www.meanwell.com/webapp/product/search.aspx?prod=ENC-120>



Batteries

- 48V system
 - String of 4 x 12V Lead Acid batteries recommended
 - AGM or VRLA types recommended
 - Size battery according to site engineering
 - Recommended parts:
 - <https://na.industrial.panasonic.com/products/batteries/rechargeable-batteries/lead-acid-vrla>



Engineered Example

- Mean Well ENC-120-48 battery charger
- 4 x Panasonic LC-RA1212P VRLA battery (12Ah)
- Kona Macro Gateway
 - 576 Wh battery capacity ÷ 15 W Gateway = 38 h back-up
- Note: Customer is responsible for any required certifications



Outdoor Solution

- Battery power solution can be put in an enclosure to provide environmental protection but there are some important considerations:
 - Lead acid batteries must be properly vented to limit hydrogen gas build-up
 - Lead acid batteries may need heating pads to maintain capacity and prevent damage in cold climates
 - Additional AC entry components are needed such as feed termination, overcurrent protection & surge suppression
 - Certifications may be more challenging

