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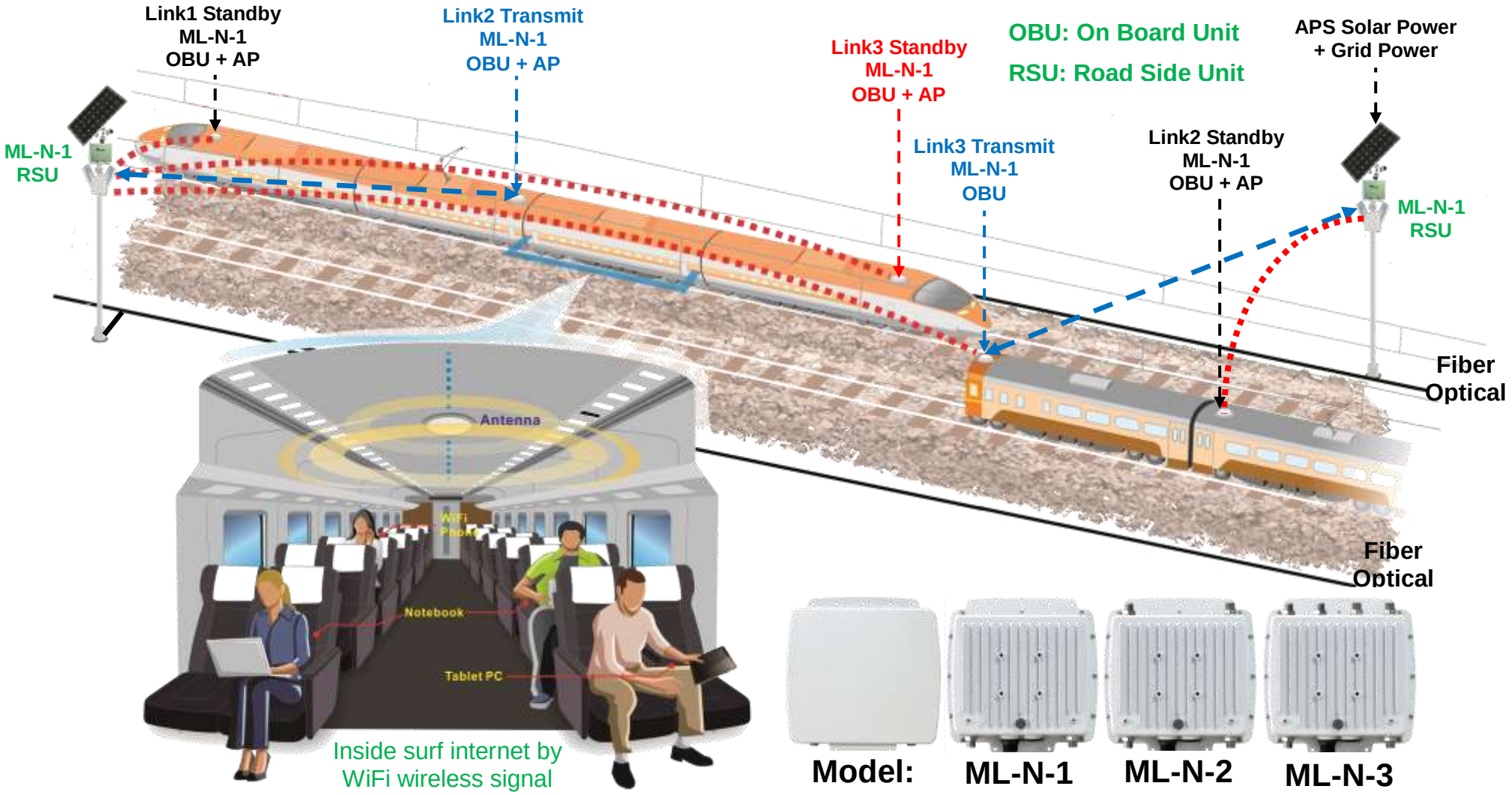
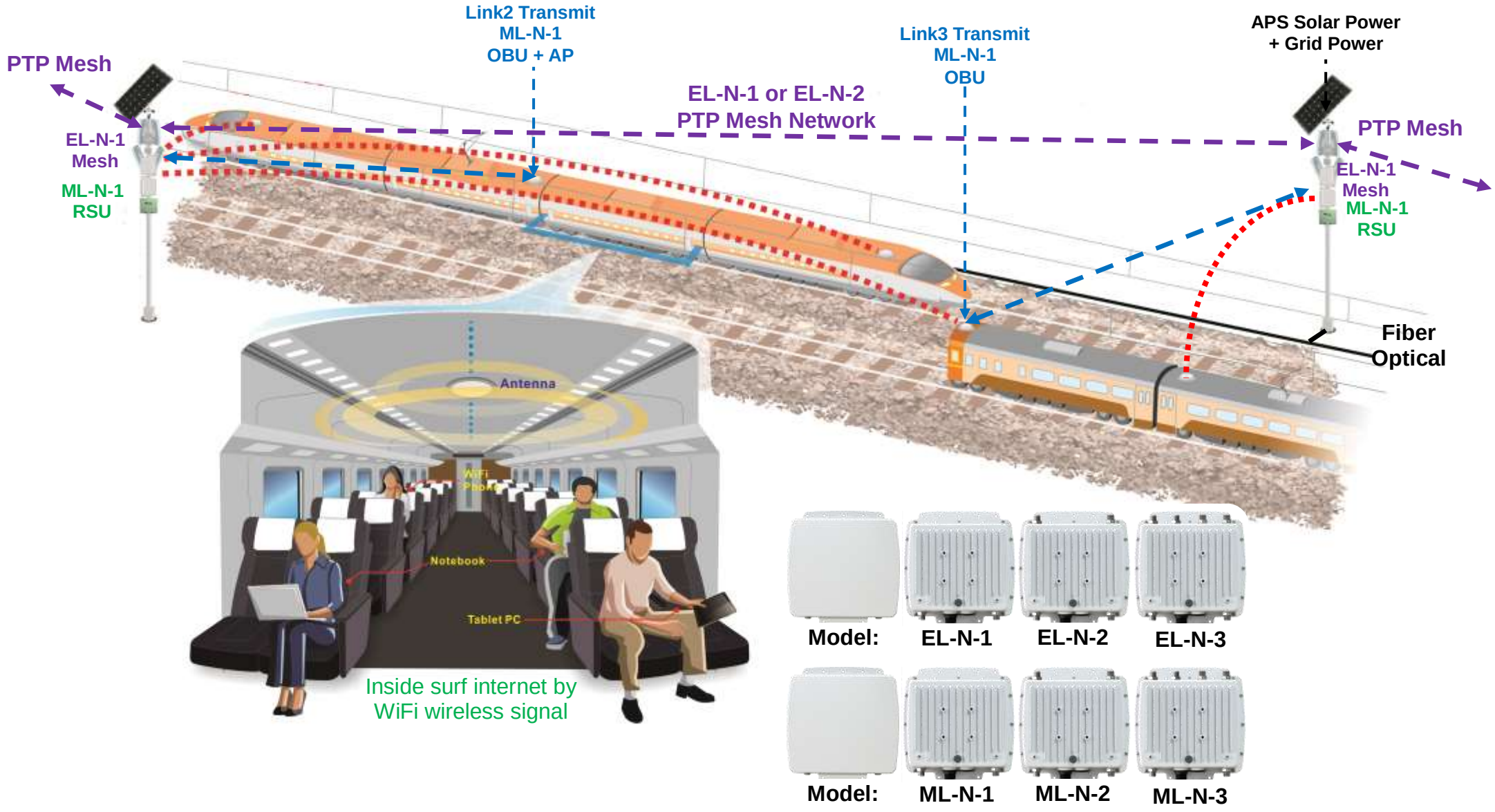
Outdoor EL-N & ML-N Series PTP Mesh Hi-mobile Wireless Network System

Design for Train / Subway / MRT (Bus) / Highway

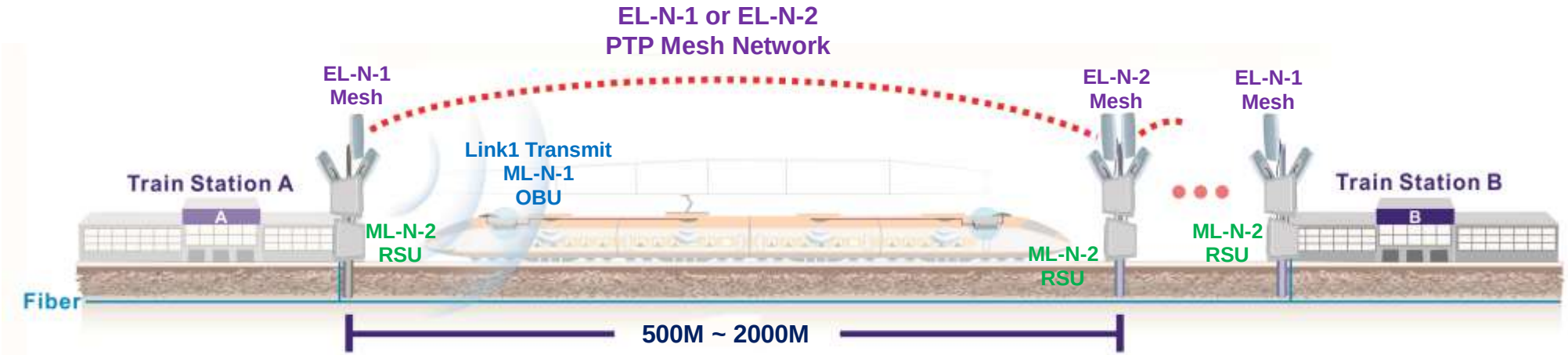
■ Only Fiber Optical Backhaul System: ML-N-1 + APS Solar Power + Grid Power

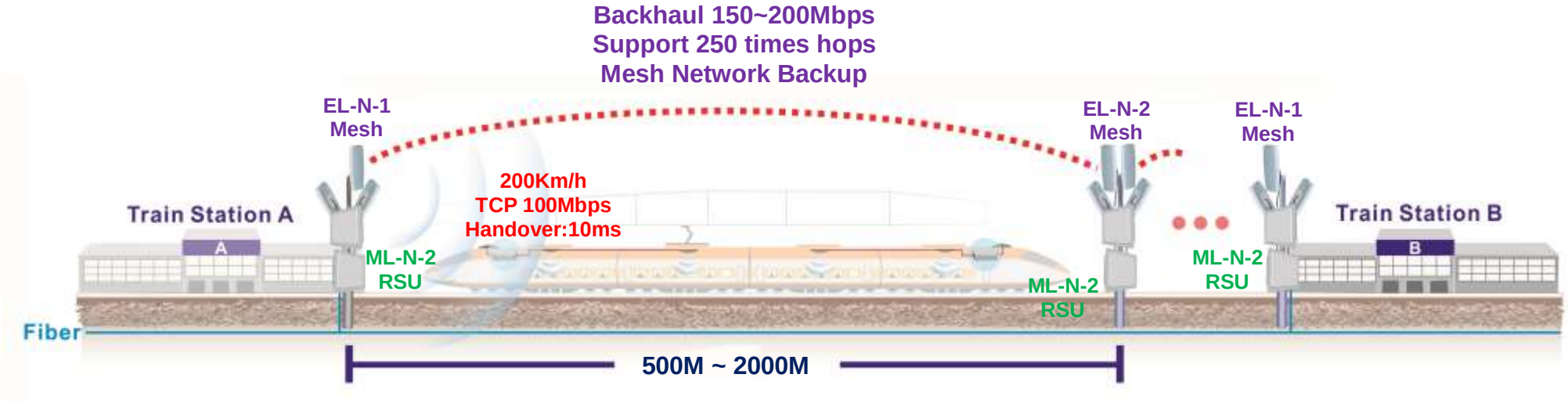


■ Fiber Optical + Mesh Network Backhaul System: EL-N-2 + ML-N-1 + APS Solar Power + Grid Power



■ Outdoor EL-N & ML-N Series PTP Mesh Hi-mobile Wireless Network System





■ APS Solar Power Wireless PTP Mesh Hi-mobile Wireless Network System

Parallel APS Solar + Grid Power Rainy Collection Energy
— APS Solar DC UPS Wireless System Design
(48Hrs Rainy Solar Power System)

A. System Power consumption:
1. Outdoor EL-N-2 : 7W/H
2. Outdoor ML-N-2 : 7W/H
3. Outdoor APS : 1W/H

B. Design Power Supply for Outdoor System about 48Hrs

Outdoor APS Solar PTP Mesh Wireless Hi-mobile System Power Consumption:

48H * (7 + 7 + 1) W/H = 720W ; 720 W / 12.8V = 56.3Ah

Suggest use→ IOP-USSS-1256-10B 717WH (56Ah @ 12.8V)

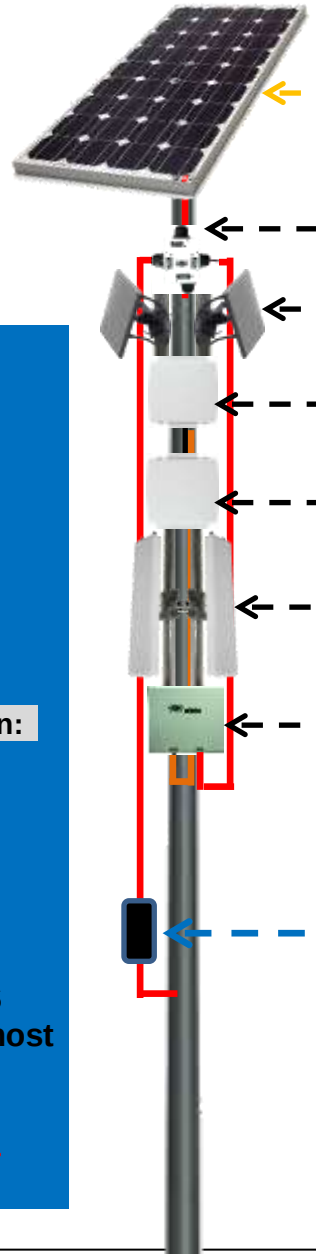
C. Calculation 2days 4hrs sunlight full charge use Solar Panel

717W / 4H * 80% * 80% * 2days = 140W/H

(80% is Winter sunlight effect, 80% is solar charger effect)

D. Usually use Grid AC Power to DC to charge USSS-1256-10B DC UPS through APS, APS can parallel integrate Grid Power + Solar Power; almost every day can full charge DC UPS power system.

E. Design APS Solar Power + Grid Power can support Grid Power-off & 48hrs Power Back up features.



Solar Panel
70~150W / 16~20V / 4~8A
Can Support 68Ah-870W
Solar DC UPS Power Systems

Outdoor DC APS
(Parallel Auto Power Selector)

Outdoor 5GHz 20dBi
MIMO Panel Antenna

Outdoor EL-N-2 PTP
Mesh Backhaul AP

Outdoor ML-N-2 RSU
PTP Mesh Hi-mobile

Outdoor 5GHz 16dBi
MIMO Sector Antenna

Solar Power On line
DC UPS Power System
(IOP-USSS-1256-10B)

Street Lamps Power Source
AC 100-264V 50/60Hz