

## Case study:

### Solving network powering problem with Power Booster

The problem occurs due to extremely long runs of the coaxial cables feeding six RF amplifiers

Output voltage of the local power supply is 87V (*complying North American standard maximum AC voltage level of 87V RMS*).

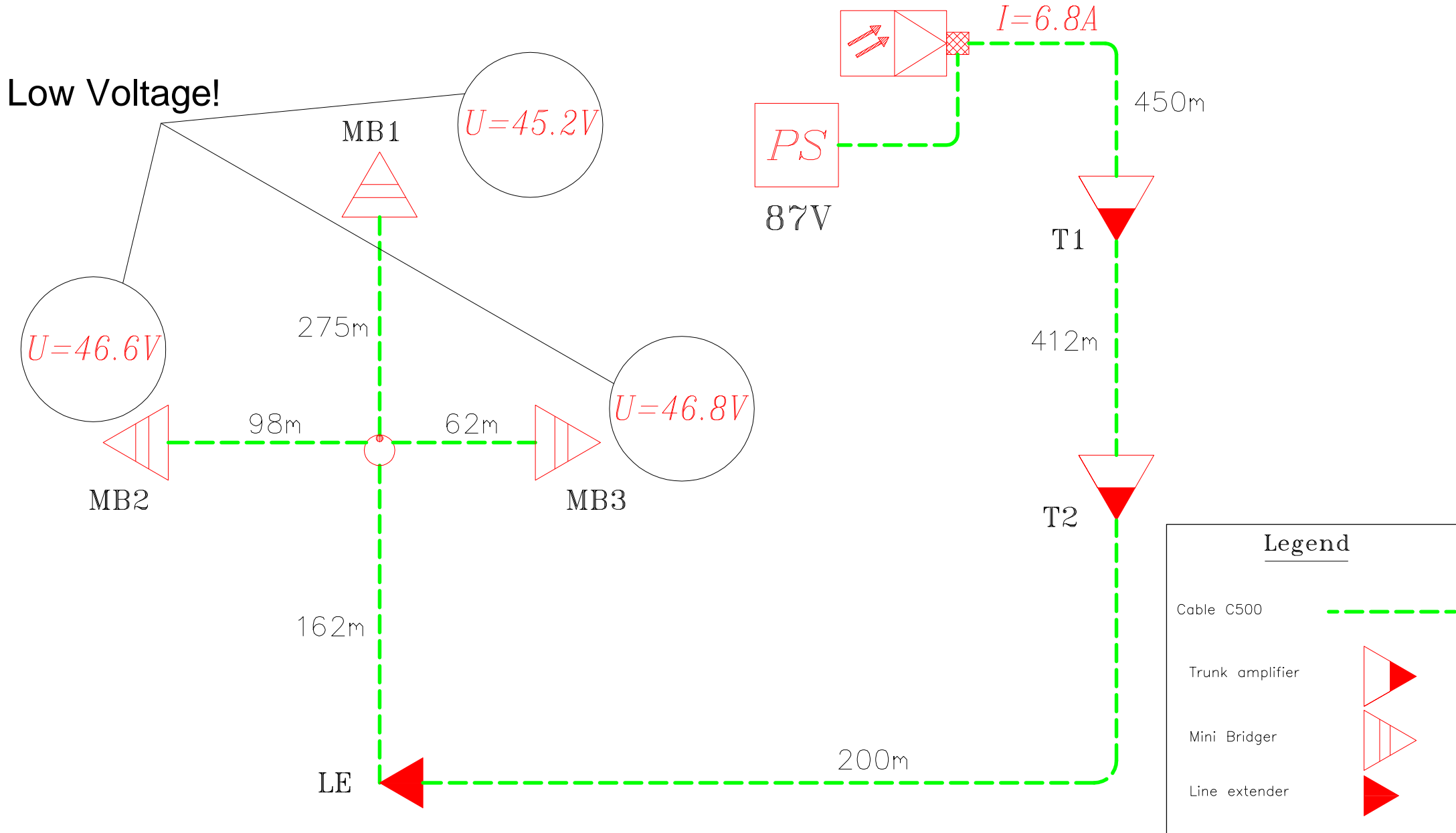
AC voltages at the locations of three remote amplifiers (MB1,MB2 and MB3) drop below minimum required for proper operation of their respective SMPS. This leads to unacceptable network instability.

#### Solution

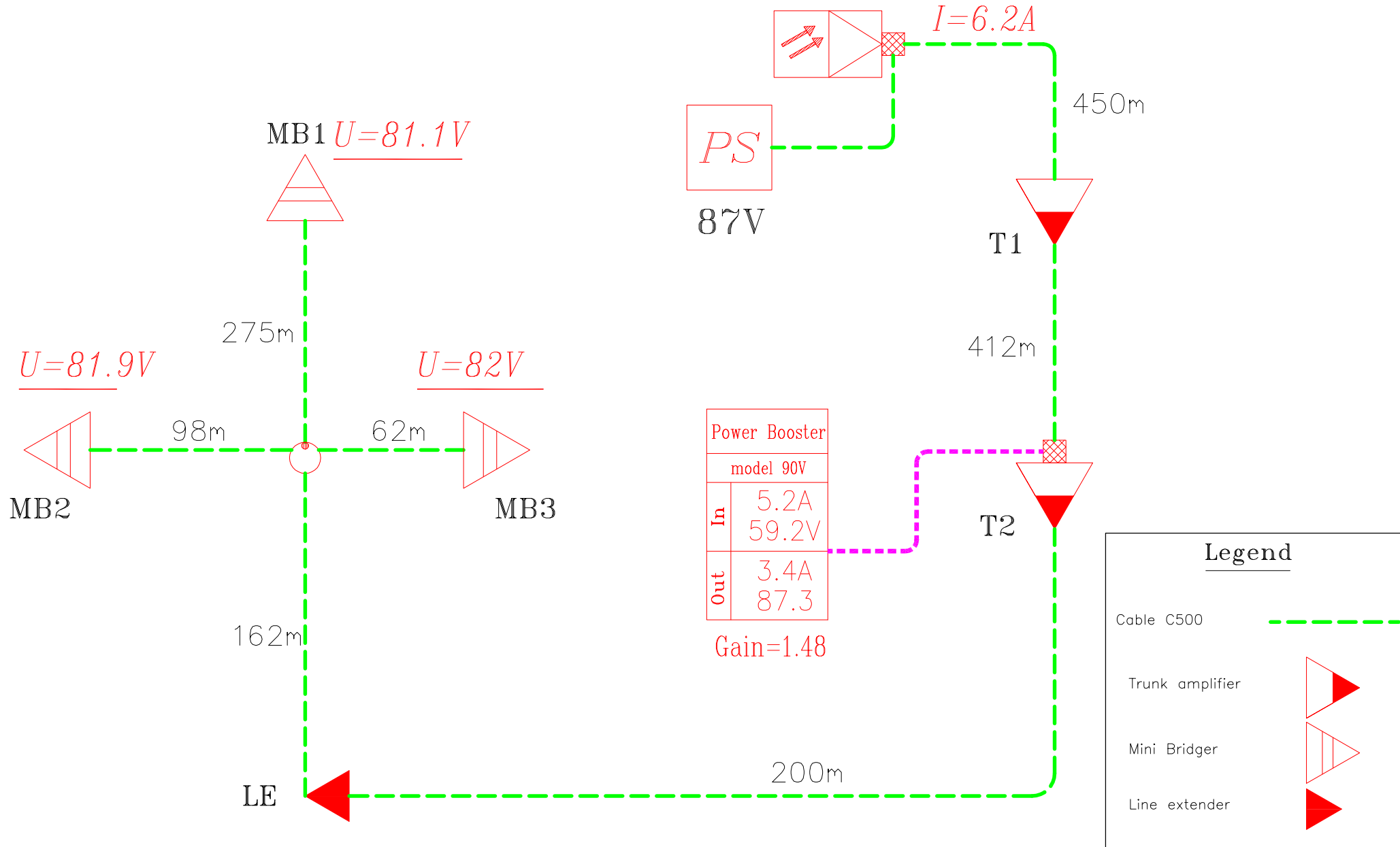
#### Comparison between two solutions

Traditional	Safecom	Traditional	Safecom
The traditional solution implies splitting network branch into two sections, each of them is fed by separate cable. In our example the additional span of cable, of the length 380m, was connected via PI to the remote amplifiers.	Safecom offers elegant solution based on its Power Booster technology. The device installed at the input of T2 raises the voltage by 14V eliminating the problem.	Materials: 380m of coaxial cable, 1 splitter,1 LPI, 4 cable connectors, 1 housing-to-housing connector	Materials: 1 Power Booster with connection kit, 1 housing-to-housing connector
		Labor : 20 working hours	Labor : 0.5 working hours

# Prior Map : Unstable Network due to "Low Voltage" Problem



# Safecom Solution: Use of Power Booster



# Alternative Solution: Power Split + Addition of Cable Span

