Overcoming smart city power problems

1. Harmonic mitigation filters



Non-linear and active components when converting energy from DC to AC power create high frequency electrical noise known as harmonic currents, which can cause voltage ripples, overheating and electromagnetic interference.

Harmonic mitigation filters keep harmonics away from the mains network to prevent these problems occurring and also reduce energy consumption.



2. Mains-isolation



Most modern technology doubles as a rudimentary medical device. The problem is that consumer devices can cause interference in medical environments.

Interference of mains-powered medical equipment can lead to inaccurate readings and pose a potential risk of electrical shock to patients.



To combat this, hospitals can use electrical isolation equipment, such as REOMED medical transformers, to protect patients from shock.



3. Aluminium windings and ingress protection

Battery technology has been the biggest barrier to widespread adoption of electric vehicles.Instead of making more powerful batteries, manufacturers can reduce the weight of a car to make its powertrain more efficient and cost effective.





Electric car systems of the future will use lightweight aluminium rather than copper-wound induction motor technology.



The race is on to develop smart cities of the future that are cleaner, greener, easier to navigate and better to live in. Let's make sure power quality doesn't hold us back!

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