

## 6.3 Electrical configuration of the S7-1500

### Electrical isolation

With the S7-1500, there is galvanic isolation between:

- The primary side of the system power supply (PS) and all other circuit components
- The (PROFIBUS/PROFINET) communication interfaces of the CPU and all other circuit components
- The load circuits / process electronics and all other circuit components of the S7-1500 components

High-frequency interference currents are conducted and electrostatic charges are avoided through integrated RC combinations or integrated capacitors.

The following figure shows a simplified representation of the potential relationships of the S7-1500 automation system.

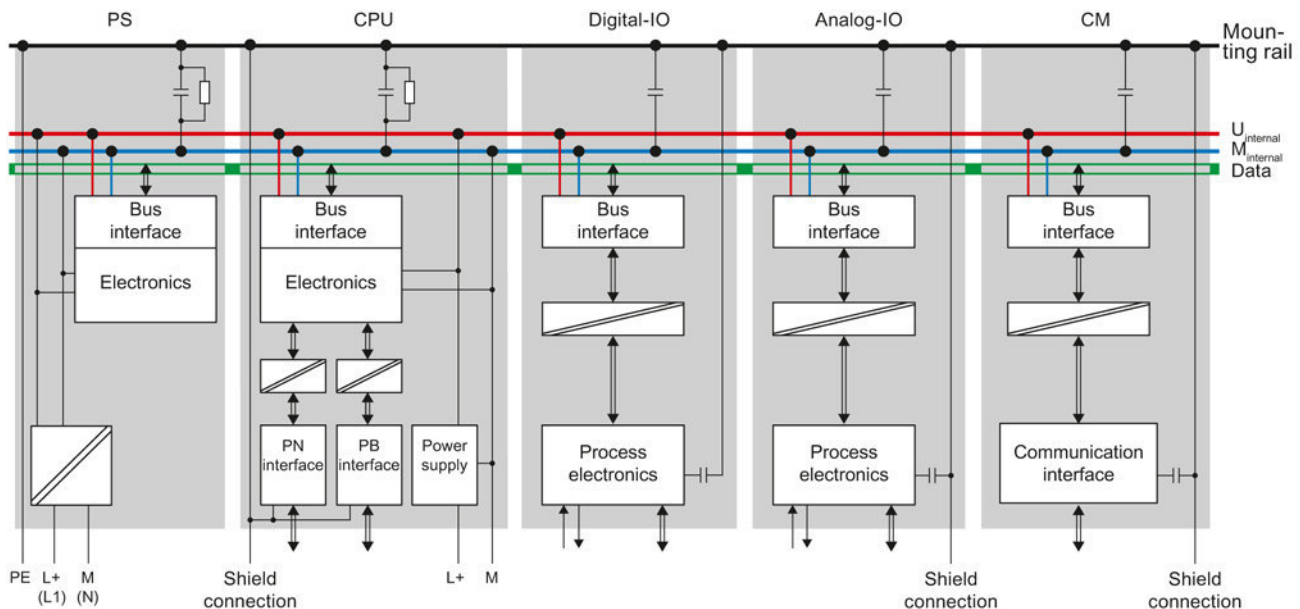


Figure 6-2 Potential relationships for S7-1500 with CPU 1516-3 PN/DP