

The diagram illustrates the electrical architecture of a photovoltaic system. At the top, the grid connection is shown with a main switch (DG+DDR) rated for $I_n=63\text{ A}$ and $I_{cs}=10\text{ kA}$, protected by a 1x(5G25) FG16(0)R16 5 m fuse. A kWh meter is installed to measure energy production. The distribution is handled by a DDI switch (In=100 A AC3) with an SPI meter. The system is divided into two main branches, each protected by a DDG switch (In=32 A, $I_{cs}=6\text{ kA}$) with 1x(5G6) FG16(0)R16 5 m fuses. The left branch (SPI ext) connects to an SMA STP 20000TL-30 inverter, which feeds five strings of SunPower modules (strings 01-05). The right branch (SPI ext) connects to an SMA STP 15000TL-30 inverter, which feeds five strings of SunPower modules (strings 01-05). Both inverters are connected to a common AC bus, which is also connected to a 0.5 kVA 230 V UPS. The system is grounded through a 1G16 ground rod. Various protective devices and wiring specifications (e.g., 2x(1x4) H1Z2Z2-K 40 m) are detailed throughout the diagram.

