

# Product Data Sheet

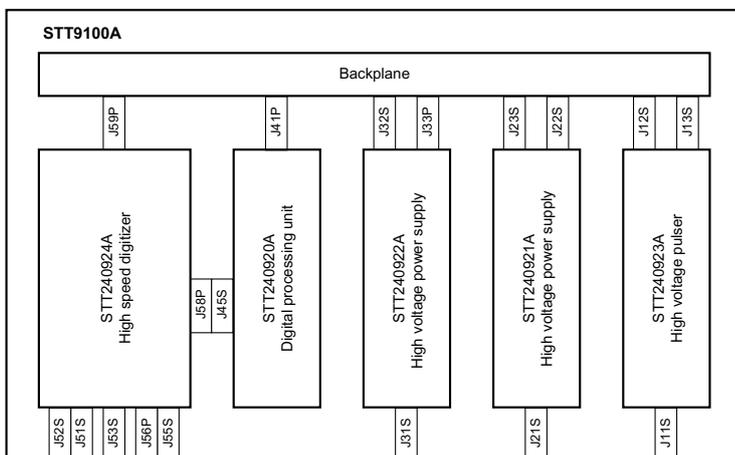
## Electronics Box (STT9100A)

Spaceflight Electronics

Version 2.1 | 2025

### Product Description

The modular and extremely compact electronics box is directly connected to the scientific instrument and includes full remote control and monitoring of the instrument. Our fast, reliable, and miniaturized electronics are unmatched, delivering a real-time and continuous data stream without dead time, and are robustly built to withstand harsh environments. Unit is powered by single 12 V or 28 V power input.



Dimensions: 161 mm x 192 mm x 119 mm

### Product Features

High speed digitizer | STT240924A

- 1 or 2 high speed 14 bit 2.5 GSPS ADC channels
- External LVDS or single-ended 50  $\Omega$  trigger input

Digital processing unit | STT240920A

- Zynq Ultrascale+ based
- SpaceWire, RS-422, RS-485, Ethernet

High voltage power supply | STT240922A

- Multichannel output up to 8 kV each
- Settling time < 500 ms

High voltage pulser | STT240923A

- Amplitude up to 800 V (< 3 ns)
- Pulse width > 500 ns

### Typical Applications

- Atmospheric and gas-phase chemical analysis
- Characterization of volatile organic compounds (VOCs)
- Isotope dating of lunar, meteoritic, and planetary materials
- Detection of ions, electrons, and photons in cosmic dust and plasma environments
- High-energy particle sensing for space weather monitoring
- Modules for Space VPX system extensions

More about us and our products:

