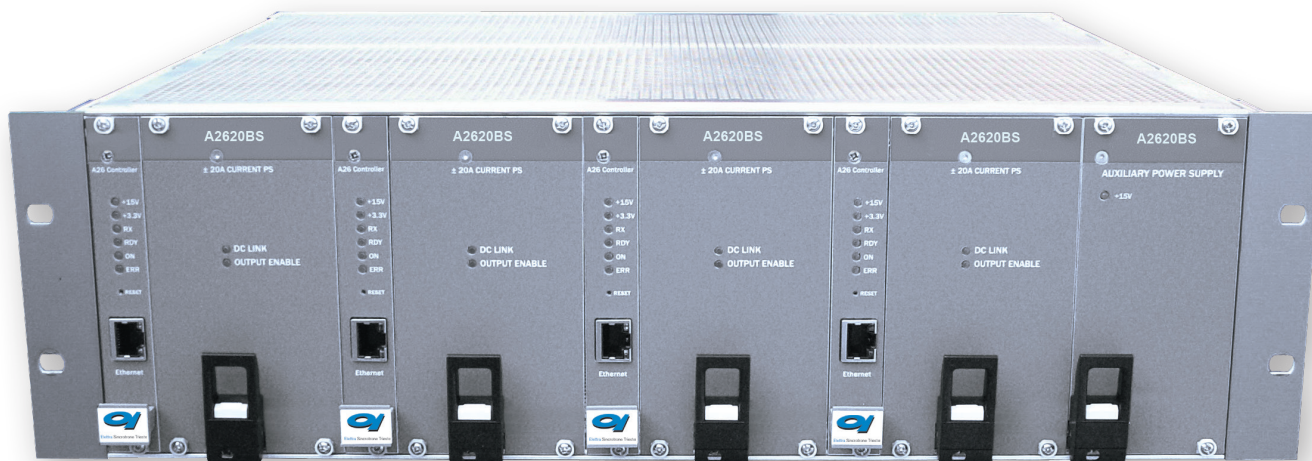


A2620BS

High Stability 20 A 20 V Bipolar Current Power Supply



HIGHLIGHTS

FEATURE

BENEFIT

Especially designed for particle accelerator facilities

Completely digital controlled feedback loop

Extremely configurable and adaptable to any load condition
Up to 95 % DC/DC power conversion efficiency

High precision shunt resistor

Extreme reliability and extreme stability for 24-hour, 365-days a year operation

Each power supply channel has Ethernet 10/100 link

Remote and fast communication

Each power supply channel is equipped with LED monitors

Straightforward troubleshooting

Modular architecture

User can substitute only a faulty board

Storage of configuration and calibration parameters in non-volatile memory on the Power Board

Extremely quick and simple, even for inexperienced users, to replace a faulty module with a functional equivalent

APPLICATIONS

- Particle accelerator facilities
- Medical equipment (resonance imaging)
- Systems with high resolution current or voltage source requirements

HOW DOES IT WORK?

The highly stable and reliable power supply system can house up to four independent bipolar modules in a standard 19-inch 3U crate. This true-bipolar system has a modular architecture and comprises a bulk AC/DC converter (A2607), an auxiliary power supply (A2606) and the DC/DC modules (A2620BS).

The A2606 auxiliary power module provides auxiliary voltage to the DC/DC converter boards installed in the crates in order to supply the control electronics while the A2607 bulk unit feeds the power part for energy conversion.

The system comprises EuroCard standard boards (12TE for the A2620BS, 14TE each for the A2606 and the A2607 modules).

The A2620BS modules are provided with two independent Digital Signal Processors supervising all processes including the remote control of the power supply via an Ethernet connection (TCP-IP or UDP). Each power supply also has LED monitors for troubleshooting and an Ethernet 100-100 auto-sensing socket for communication. Cooling is performed by forced air convection. The fan unit is placed directly under the system rack

SPECIFICATIONS

Output Current Range	± 20 A
Output Current Resolution	640 µ A
Output Voltage Range	± 20 V
DC/DC efficiency (at full load)	> 95 %
Input Voltage	90/260 V AC (47/63 Hz) and 12 to 24 V DC
External Interlocks	Magnet fault (inp); PS status (out); Bulk PS status (inp); Bulk PS ON/OFF (out)
Internal Interlocks	Under voltage (inp); over temp. (inp); over current (inp); over voltage (out)
Bandwidth-3dB(@2Ωload)	1.5 KHz
Accuracy	0.05 %
Long Term Stability	± 25 ppm /FS (> 8 hrs)
Max Ripple	30 ppm (on resistive load)
Ethernet 10/100	TCP-IP or UDP Protocol
Data transfer	Up to 1Mbit/s
Drivers	EPICS, TANGO
Dimensions	19" wide, 3U rack

DELIVERABLES

- Power supply unit: up to 4 independent current modules combined with the auxiliary power supply module housed in a standard 19-inch 3U crate
- A2607 bulk AC/DC
- External fan unit for air convection cooling
- Software and drivers are available for different operating systems like MS Windows, Linux, Mac OS X
- EPICS and TANGO drivers

Contact us!

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