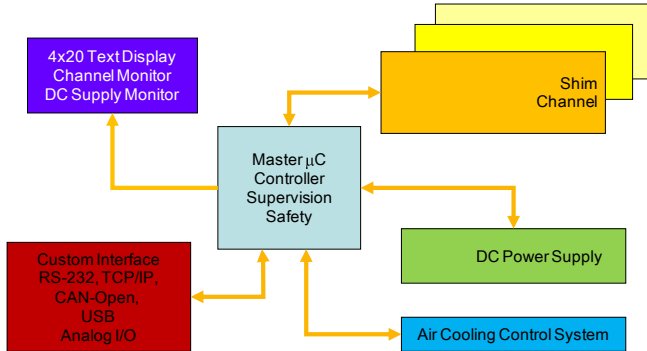


Shimming Technology

MXD-8 and MXD-16

OEM and PRE-Clinical Applications

Real-time ready 5A@ 24 V DC and 70 V AC



The Challenge

Provide stable current source with high output compliance for control of multiple shim channels in a modern MRI system.

Ensure stable operation in presence of large voltages induced in the shim coils.

Flexible digital and analog control from the MRI console for static and dynamic operation.

The MXD series shim power amplifier enables shimming of MRI magnets under static and dynamic shim updating and real time shimming on multiple slices, voxels or regions of interest with simultaneous compensation of shim induced eddy currents.

| | |
|------------------------|--|
| Output channels | 8 or 16 |
| Digital Resolution | 16 bit |
| Total output | +/-20A or +/-40A |
| Maximum current output | 5A per channel, capable of parallel operation |
| Maximum voltage output | DC compliance +/-24V AC compliance +/-70V |
| AC Power | 115 or 230 VAC, 50/60 Hz |
| Cooling system | Forced air |
| Setup control | RS-232 |
| Operating control | Customer specific (RS-232, Ethernet, USB, CAN,...) |
| Analog input | +/- 5V or +/- 10 V differential |
| Thermal stability | 50 ppm/degree C |
| DC offset trim | +/- 1% |
| Load limits | 2-4.8 ohm, 0-20 mH |
| Regulatory approval | UL/EN/IEC/CSA C22.2 60601#3 |
| Dimensions | 19" x 3U x 550 mm (22") |

Real Time Shimming RTS

Ability to change shim current values instantaneously

Dynamic Shim Update DSU

Process allowing synchronous change of shim currents as required by the imaging sequence

Eddy Current Compensation ECC

Modification of shim currents for correction of time dependent field changes after a current change

Specifications subject to change

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