

Model 4T70A

Features:

- Optimized for 4 Tesla use
- Broadband: 15~175MHz
- 7kW of Linear Power
- Designed for Patient Safety
- CE, UL & CSA Certified
- High Reliability
- Solid-state architecture

Benefits:

- Only one amp needed - Besides ^1H , the broadband capability allows for easy coverage of other common nuclides like ^{19}F , ^{31}P , ^{13}C , ^{129}Xe , ^{17}O , ^{14}N
- Designed in safety features combined with regulatory safety compliance allows for "no worry" operations for patients and service personnel
- Reliability, designed-in and manufacturing tested, provides a high MTBF, zero maintenance amplifier



Model 4T70A

Solid-state, Pulsed, RF Power Amplifier Specifications

Electrical

Frequency range.....	15 - 175 MHz
Pulse power into 50 ohms	7,000 W min
Linearity (30dB dynamic range from 7kW).....	±1.0dB @ ¹ H, ±1.5db max other nuclei.
Output power stability	0.3 dB within 30 min. after 5 min warm-up
Output phase stability	3.0° within 30 min. after 5 min warm-up
Harmonic levels	2nd: <-22 dBc, 3rd: -15 dBc, typ.
Gain (0 dBm input).....	68.5 dB min.
Gain flatness (-15dBm P _{in}).....	±4 dB
Input/output impedance	50 ohms nominal
Input drive level for rated power output.....	0dbm, max.
Input power, without damage.....	+10dbm max
Input VSWR.....	< 1.5:1
Pulse width	10 ms max. @ 7.0 kW
Duty cycle	Up to 10% @ 7.0 kW
Output noise level (blanked)	< 10 dB over thermal KTB
Blanking delay	< 2 μs "ON", 2 μs "OFF"
Protection/System Monitors.....	1. Excessive VSWR 2. Excessive input/output power 3. Excessive duty cycle/pulse width 4. Excessive temperature 5. Over/under voltage

Supplemental:

Connectors, rear panel	1. RF input: BNC (F) 2. RF output: HN (F) 3. Gating (blanking): BNC (F) 4. User Interface: 25 pin D (F), filtered
Indicators, front panel	1. Power 4. Unblank 2. Standby 5. Fault 3. Ready 6. System status code
Controls	1. AC power 2. Forward/Reflected power monitoring
Cooling	Air-cooled
Operating temperature.....	Ambient: +10° to +40° C
Line voltage	208 VAC, ±10%, 3 Ø, 50 - 60 Hz
AC power requirements	25A/phase, 208 VAC
Size (HWD), package	70x25x35.6 inches, 19" rack cabinet
Weight	946lbs crated

Herley Medical Products reserves the right to change specifications and/or discontinue this product without notice.