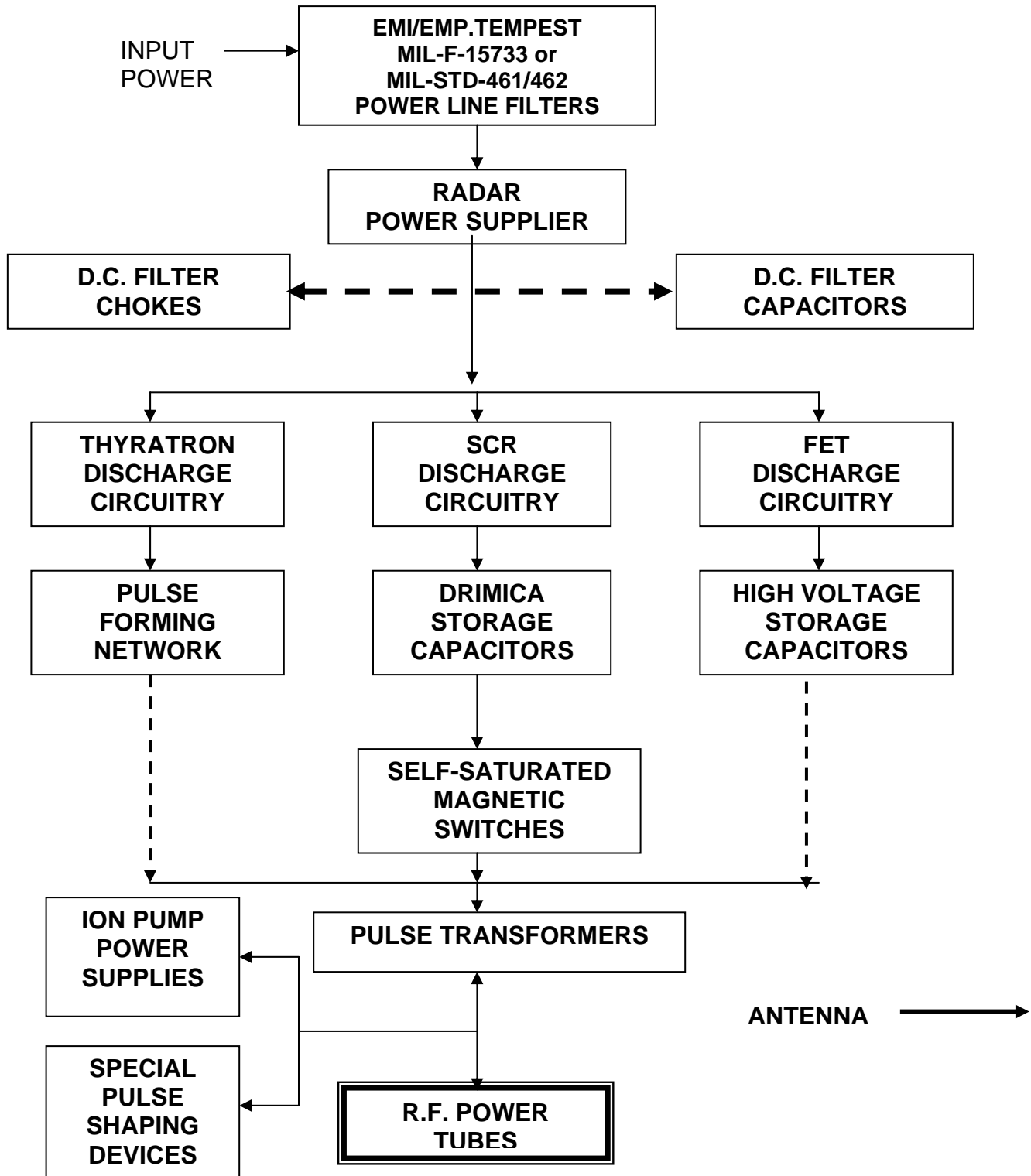




American Matrixx Corporation
Defense & Industrial Procurement
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Radar Products Line Card





American Matrixx has proven procurement expertise in:

- ◆ Pulse Forming Networks
- ◆ Pulse Transformers
- ◆ Charging Reactors
- ◆ Power Transformers
- ◆ Pulse Capacitors
- ◆ Radar Power Supplies
- ◆ Pulse Systems
- ◆ Pulse Modulators
- ◆ Transmitters

No matter whether the application is airborne, ground, or shipboard, Matrixx sourcing brings decades of experience to the manufacturing, repair and testing of each radar transmitter. The typical power outputs of transmitters we procure range from 100 kilowatts to 1 megawatt. Among the types of output tubes we employ are magnetrons, TWT's and klystrons.

All transmitters we offer boast the highest reliability. Apart from the output tube, each is entirely solid-state. Additional reliability features include integral power supplies, control circuits, fault protection circuits, and built-in test circuits. The transmitters listed here are only a few examples of the wide variety manufactured and repaired through Matrixx.

[SP972]

Application: Ground-Based Radar

Features solid-state switching

- Power Input: 600 volts, 400 hertz, 3 phase
- Power Output: 20 kilovolts @ 15 amps
- Pulse Width: 40 microseconds
- Duty Cycle: 0.019 bursts, 0.011 continuous mode staggered P.R.F.
- Dimensions: 22.44"W x 22.75"D x 21.75"H (less case)

[W5P0100]

**Application: Ground-Based, Transportable
Air Traffic Control Radar**

- Power Input: 115/208 volts, 60 hertz, 3 phase
- Power Output: 1 megawatt peak, 1 kilowatt average
- Pulse Width: 1 microsecond
- Duty Cycle: 0.001
- Dimensions: Power Supply: 18"W x 22"D x 13"H
Modulator: 23"W x 24"D x 27"H

[W5P0100-1]

Application: Shipboard Air Traffic Control Radar

- Power Input: 115/208 volts, 60 hertz, 3 phase
- Power Output: 1 megawatt peak, 1 kilowatt average
- Pulse Width: 1 microsecond
- Duty Cycle: 0.001
- Dimensions: Power Supply: 18"W x 22"D x 13"H
Modulator: 23"W x 24"D x 27"H



[W5P0102]

Application: Shipboard Radar Decoy System

Power Input: 24-32 VDC (Thermal Battery)
 Power Output: 100 KW peak, 236 W avg
 Pulse Width: 3.0 microseconds
 Duty Cycle: 0.00236
 Dimensions: 4.88" dia. X 12" long
 Weight: Approx. 12 pounds

[W5P0103]

Application: Airborne Side-Looking Radar

Features X-band radar transmitter
 Power Input: 115/208 volts, 400 hertz, 3 phase
 Power Output: 20 kilowatt peak
 Pulse Width: 200 nanoseconds
 Repetition Rate: 1350 pulses per second
 Dimensions: 9.6"W x 12"D x 5.21"H
 Weight: 37 pounds

PULSE SYSTEMS (MODULATORS)

[SP889]

Application: Shipboard Radar

Features 3-channel solid-state switching
 Power Input: 1 kilovolt peak charge from storage capacitors of:
 Narrow = 0.6 MFD
 Middle = 1.1 MFD
 Wide = 2.25 MFD
 Power Output: 25 kilovolts peak @ 20 amps peak
 Pulse Widths: Narrow = 0.1 microseconds
 Middle = 0.25 microseconds
 Wide = 1.00 microseconds
 Duty Cycle: .0012
 Dimensions: 12"W x 8"D x 5 25/32" H

[SP970]

Application: High-Altitude Airborne Radar

Features magnetron well and DE-Q circuit for pulse-to-pulse regulation.
 Power Input: 200 volt line-to-line, 400 hertz, 3 phase
 Power Output: 15 kilovolts @ 16 amps
 Pulse Widths: 0.5, 2.4 microseconds
 Duty Cycles: 0.0008, 0.00096
 Dimensions: Main Body: 8"W x 6.5"D x 5.75"H
 Magnetron Well Appendage: 35/8" W x 49/16"D x 23/16"H



[SP942]

Application: Airborne Radar

Features solid-state switching.

Power Input: 28 volts DC nominal @ 1.52 amps
Power Output: 2.3 kilovolts @ 1.4 amps peak
Pulse Width: 20 nanoseconds, 5000 PPS
Duty Cycle: 0.0001
Dimensions: 9"W x 7"D x 35/8"H

[SP819]

Application: Shipboard Radar

Power Input: 12 kilovolts peak charging voltage
Power Output: 22 kilovolts @ 26 amps
Pulse Widths: 0.22, 0.43, 0.53 microseconds
Duty Cycle: 0.001 maximum
Dimensions: 5¹⁹/₃₂"W 6¹⁶/₃₂"D x 4³/₄"H

[SP849]

Application: Airborne Weather Radar

Power Input: 115 volts, 400 hertz
Power Output: 13 kilovolts @ 12 amps
Pulse Width: 5 microseconds
Duty Cycle: 0.001
Dimensions: 6.4"W x 7"D x 5.9"H

[SP821]

Application: Shipboard Radar

Power Input: 12 kilovolts DC maximum at 0.28 amps
Power Output: 38 Kilovolts @ 60 amps peak (CFA load)
Pulse Widths: 0.4, 0.8 microseconds
Duty Cycle: 0.001
Dimensions: 15⁵⁹/₆₄"W x 13⁵⁷/₆₄"D x 8⁷/₁₆"H

[SP942]

Application: Airborne Radar

Features solid-state switching.

Power Input: 28 volts DC nominal @ 1.52 amps
Power Output: 2.3 kilovolts @ 1.4 amps peak
Pulse Width: 20 nanoseconds, 5000 PPS
Duty Cycle: 0.0001
Dimensions: 9"W x 7"D x 35/8" H



[SP819]

Application: Shipboard Radar

Power Input: 12 kilovolts peak charging voltage
Power Output: 22 kilovolts @ 26 amps
Pulse Widths: 0.22, 0.43, 0.53 microseconds
Duty Cycle: 0.001 maximum
Dimensions: 5¹⁹/₃₂"W 6¹⁵/₃₂"D x 4³/₄"H

[SP821]

Application: Shipboard Radar

Power Input: 12 kilovolts DC maximum at 0.28 amps
Power Output: 38 kilovolts @ 60 amps peak (CFA load)
Pulse Widths: 0.4, 0.8 microseconds
Duty Cycle: 0.001
Dimensions: 15⁵⁹/₆₄"W x 13⁵⁷/₆₄"D x 8⁷/₁₆"H

[SP644]

Application: Airborne Pulse Modulator for Side-Looking Radar

Power Input: 115 volts, 400 hertz, 3 phase
Power Output: 20 kilovolts @ 20 amps
Pulse Width: 0.8 microseconds
Duty Cycle: 0.00039
Dimensions: 8"W x 9"D x 3³/₁₆"H

[SP841-3]

Application: Airborne Radar (Charging Reactor with DE-Q)

Features secondary for DE-Q, built-in PFN voltage sense signal.
Power Input: 115 volt line to neutral, 400 hertz, 3 phase
Power Output: 15 kilovolts @ 16 amps
Pulse Widths: 0.5, 2.4 microseconds
Duty Cycle: 0.001
Dimensions: 8"W x 6¹⁵/₁₆"D x 5³/₄"H

[SP952]

Application: Airborne Radar

Power Input: 2.3 kilovolts DC @ 0.068 amps DC
Charging Reactor: 1.8 henry @ 0.068 amps DC
5 kilovolt, 36 ohms isolation
PFN: 5 kilovolt charging, 40 ohms
Pulse XFMR: 1:1 ratio, pulse of 1.5 kilovolts, 2.5 microseconds
Duty Cycle: 0.0015
Dimensions: 3¹/₂"W x 6³/₄"D x 6¹/₈"H



[SP737]

Application: Marine Radar Pulse Package

Complete pulse package contains charging reactor, PFN, dual pulse width, filament transformer for magnetron, and pulse transformer.

Power Input: 3000 volts DC (FIL: 105 V 50/60 Hz)
Power Output: 12 kilovolts @ 12 amps (FIL: 6.3V 5.6V @ 1.0A)
Pulse Widths 0.5, 0.09 microseconds
Repetition Rate: 750, 1500 pulses per second
Dimensions: 4"W x 4¹¹/₁₆"D x 4¹⁵/₁₆"H

[SP738]

Application: Airborne Radar

Complete pulse package contains:

Pulse Forming Network
Working Voltage: 17 kilovolts
Pulse Width: 0.42 microseconds
Repetition Rate: 3600 pulses per second
Pulse Forming Network
Working Voltage: 16 kilovolts pk charge
Pulse Width: 2.35 microseconds
Repetition Rate: 1500 pulses per second
Bifilar Pulse
Transformer
Output: 62 kilovolts
Dimensions: 5¹/₂"W x 8¹/₈"D x 8¹/₄"H

[SP678]

Application: Airborne Radar

Complete pulse package includes charging choke and 3 pulse forming networks with coaxial cable output.

Charging Voltage: 10 kilovolts
Pulse Widths: 0.4, 1.2, 3.0 microseconds
Duty Cycle: 0.0024, 0.08, 0.03
Impedance: 50 ohms
Dimensions: 4⁵/₈"W x 9¹/₈"D x 2¹/₈"H

DYNAMICALLY DESIGNED MODULAR PULSE COMPONENTS

- MIL-C-19978
- MIL-C-25
- MIL-N-23182
- MIL-T-27 GRADE 4
- MIL-T-27 GRADE 5
- MIL-T-27 GRADE 6



PULSE TRANSFORMERS

[TP608]

Application: Shipboard Radar

Features filament transformer (input: 115 volts, 400 hertz, output: 6.3 volts, 5.5 amps).

Power Input: 2050 volts peak, 274 ohms
Power Output: 7.5 kilovolts
Pulse Width: 32 microseconds
Duty Cycle: .0192
Dimensions: 5"W x 6"D x 6 + 1¹³/₁₆"H

[TP529]

Application: Shipboard Radar

Primary Voltage: 6.5 kilovolts, 260 amps peak
Secondary
Voltage: 40 kilovolts, 174 amps peak
Pulse Width: 0.3 to 3 microseconds
Duty Cycle: 0.001
Dimensions: 4¹¹/₁₆"W x 7⁵/₈"D x 6¹/₈"H

[TP790]

Application: Shipboard Radar

Primary Voltage: 4 kilovolts peak
Secondary
Voltage: 30 kilovolts peak 2 4.5 amps peak
Pulse Width: 34 microseconds
Duty Cycle: 0.03
Dimensions: 8"W x 8"D x 10"H

[TP917}

Application: Ground-Based Radar

Features 26-kilovolt insulation with optical isolation.

Primary Voltage: 220 volts peak
Secondary
Voltage: 1 kilovolt peak
Pulse Width: 1 microsecond
Duty Cycle: Classified
Dimensions: 6¹/₄"W x 4¹/₄"D x 5³/₁₆"H

[TP957]

Application: Ground-Based Radar

Power Input: 1.2 kilovolts
Power Output: 34 kilovolts peak
Pulse Width: 18.28 microseconds @ 90 percent
Duty Cycle: 0.0356
Dimensions: 7¹/₂"W x 7¹/₂"D x 8"H



[TP924]

Application: Ground-Based Radar

Power Input: 10 kilovolts @ 588 amps peak
Power Output: 95 kilovolts peak
Pulse Widths: 10, 6, 4. 2.5 microseconds
Duty Cycle: 0.004, 0.104
Dimensions: 16.88"W x 10.38"D x 29.12"H

[TP992]

Application: Shipboard Radar

Primary Voltage: 2836 volts @ 75 ohms
Secondary
Voltage: 27 kilovolts @ 4 amps peak
Pulse Width: 35 microseconds
Duty Cycle: 0.03
Dimensions: 11³/₄"W x 20¹/₂"D x 16¹/₂"H

[TP988]

Application: Shipboard Radar

Primary Voltage: 475 volts @ 510 maps peak
Secondary
Voltage: 3458 volts @ 70 amps peak
Pulse Width: 32 microseconds
Duty Cycle: 0.025
Dimensions: 5.45"W x 5.45"D x 7.06"H

[TP1000]

Application: Air Traffic Control Radar

Features filament voltage and current sensing, BNC connector, and pulse current monitor.
PT Reset: 6 amps
Power Input: 8 kilovolts @ 300 amps peak
Filament Input: 40 volts, 10 kilohertz
Power Output: 40 kilovolts maximum cathode voltage, 10 volts DC @ 20 amps max.
Pulse Width: 1 microsecond
P.R.F.: 1250 pulses per second
Dimensions: 10.10"W x 6.38"D x 8.75"H

[TP926]

Application: Ground-Based Radar

Isolation trigger transformer converts two positive pulses to a positive "on" trigger and negative "off" trigger. Includes modulator fault assembly for both triggers.

Primary Voltage: 28 volts peak to peak @ 47 kilovolts peak
Secondary Volt: 10 volts peak to peak @ 47 kilovolts working level
Pulse Width: Grid on pulse +25 volts peak @ 2 microseconds.
Grid off pulse -25 volts peak @ 2.5 microseconds
P.R.F. 5000 pulses per second Duty Cycle: 0.05
Dimensions: 6.5"W x 6.5"D x (6.95 + 4.75)"H



[TP829]

Application: Ground-Based Radar

Complete pulse package contains floating, adjustable magnetron bushing, compensated magnetron well bellows, on-board mounting platform for magnetron, RF flange for bulkhead mounting, cooling fins for heat dissipation, and oil fill and drain valves.

Power Input: 11 kilovolts peak, 220 amps peak
 Power Output: 53 kilovolts peak, 45 amps peak
 Filament Input: 120 volts RMS, 60 hertz
 Filament Output: 3 volts RMS, 100 amps RMS
 Pulse Width: 3 microseconds
 Duty Cycle: 0.001
 Dimensions: 18"W x 25"D x 18⁹/₁₆"H

PULSE FORMING NETWORKS

[1M145]

Application: Ground-Based Radar

Charging Voltage: 1 kilovolt
 Pulse Width: 18.28 microseconds @ 98 percent
 Duty Cycle: 0.04
 Impedance: 53 ohms
 Dimensions: 20⁵/₈"W x 7"D x 15⁵/₈"H

[18M107-3]

Application: Ground-Based Radar

Working Voltage: 19.8 kilovolts
 Pulse Width: 93 microseconds
 Duty Cycle: 0.0279
 Impedance: 39.4 ohms
 Dimensions: 11¹/₄"W x 24"D x 44³⁹/₆₄"H

[33M102-1]

Application: Airborne Radar

Darlington-type pulse forming network
 Working Voltage: Terminal 1: 16.5 kilovolts
 Terminal 2: 1 kilovolts
 Terminal 3: 33 kilovolts
 Pulse Width: 0.125 microseconds
 Repetition Rate: 450 pulses per second
 Impedance: 667 ohms
 Dimensions: 4¹/₂"W x 9¹/₄"D x 4¹/₂"H



[12M125]

Application: Airborne Radar

Working Voltage: 12.2 kilovolts
Pulse Width: 13.05 microseconds
Duty Cycle: 0.0039
Impedance: 7.8 ohms
Dimensions: 8⁸/₃₂"W x 18"D x 13³/₄"H

[17M112]

Application: Air Traffic Control Radar

Charging Voltage: 17 kilovolts peak @ 300 amps peak
Pulse Width: 1 microsecond
Repetition Rate: 1250 pulses per second
Impedance: 30 ohms
Dimensions: 6.69"W x 10.25"D x 5.25"H

[26M109]

Application: Shipboard Radar

Working Voltage: 26 kilovolts
Pulse Width: 30 microseconds
Duty Cycle: 0.025
Impedance: 44 ohms
Dimensions: 11"W x 42"D x 12"H

CHARGING REACTORS

[CC537-2]

Application: Shipboard Radar

Charging Voltage: 9 kilovolts to 18 kilovolts
Current: 1.4 amps (5.5 amps peak)
Inductance: .275 henry
Dimensions: 7¹/₈"W x 7"D x (8 + 4³/₁₆)"H

[CC783]

Application: Airborne Radar

Working Voltage: 12.5 kilovolts to 25 kilovolts
Current: 3 amps (6.2 amps peak)
Inductance: 1.8 henry
Dimensions: 10⁵/₆₄"W x 14"D x 11¹/₈"H

[CC1003]

Application: Airborne Radar

Working Voltage: 500 volts/1000 volts
Current: 31 amps (95 amps peak)
Inductance: 3.6 henry
Dimensions: 5.62"W x 7.45"D x 3.76"H



Broad spectrum of power transformers:

Single – or three-phase; with frequencies of 50 hertz, 60 hertz or higher; inverter or DC-to-DC converter products; dry or oil-filled; and with or without water cooling.

[TR990]

Application: Shipboard Radar

Power Input: 360 volts RMS, 30 kilohertz
Power Output: 720 volts RMS
Load Current: 10 amps RMS
Regulation: 1 percent
Ripple: 0.05 percent
Dimensions: 5.5"W x 7.62"D x 6.95"H

[TR900]

Application: Shipboard Radar

Power Input: 208 volts line-to-line, 400 hertz, 3 phase
Power Output: 2.575 kilovolts RMS line-to-line @ 0.36 amps DC from 3 phase
fullwave bridge
Isolation: 6.88 kilovolts DC
Dimensions: 8¹/₈"W x 3⁷/₁₆"D x 6⁵/₈"H

[TR930]

Application: Mobile Ground-Based Radar (Gas Filled)

Power Input: 115 volts RMS, 400 hertz
Power Output: 1: 115 volts, 2 amps
2: 38 volts, 5.5 amps
3: 38 volts, 5.5 amps
Isolation: 50 kilovolts DC
Dimensions: 8¹/₂" diameter x 10³/₄"H

[TR612}

Application: Shipboard Radar

Power Input: 208 volts, 400 hertz, 3 phase
Power Output: 14 kilovolts DC @ 2.5 amps
Dimensions: 13"W x 10"D x 8³/₄"H

[TR862]

Application: Shipboard Radar

Features extremely low stray capacitance and leakage inductance.
Power Input: 300 volts, 400 hertz + 2 taps ± 6 percent
Power Output: 10 windings, 4300 volts each @ 0.55 amps
Water Flow: 1.5 gallons per minute
Dimensions: 22"W x 18"D x 19"H



[TR1049]

Application: Ground-Based Radar

Power Input: 440 volts, 3 phase Y T5.4 amps, 60 hertz
 Power Output: 1: 114.6 volts, 3 phase > 71.8 amps load
 2: 114.6 volts, 3 phase Y 124.4 amps load
 3: 29.9 volts, 3 phase > 28.2 amps load
 4: 29.9 volts, 3 phase Y 48.8 amps load
 Regulation: 1 percent
 Water Flow: 0.7 gallons per minute
 Dimensions: 11.5"W x 11.5"D x 16"H

[SR1029]

Application: Air Traffic Control Radar

Primary Voltage: 7200 volts
 Delay: 1.62 microseconds
 Dimensions: 5.2"W x 5.2"D x 2.9"H

[SR1003]

Application: Air Traffic Control Radar

Delay Reactor-L1
 Voltage: 1000 volts
 Peak Current: 1900 amps
 Reset Current: 6 amps
 PRF: 1250 pulses per second maximum
 Delay: 10 microseconds
 Switching Transformer-T1
 Voltage: 1000 volts (secondary)
 Peak Current: 1900 amps (primary)
 300 amps (secondary)
 Reset Current: 6 amps
 PRF: 1250 pulses per second maximum
 Pulse Width: 1 microsecond
 Delay: 5 microseconds
 Turns Ratio: 1:17 (primary to secondary)
 Dimensions: 11.12"W x 6.9"D x 6.25"H

RADAR MODULATORS

[RP928]

Application: Mobile Ground-Based Radar

Power Input: 376 volts 2 4500 hertz, square wave
 Power Output: -40 kilovolts DC
 Dimensions: 16.32"W x 16.41"D x 11.32"H



[RP976]

Application: Mobile Ground-Based Radar

Power Input: 90 volts peak
Power Output: -15.2 kilovolts DC, -10.9 kilovolts DC +200 volts DC
Pulse Width: 75 microseconds
Duty Cycle: 0.0075
Dimensions: 23⁷/₈"W x 12"D x 7⁷/₈"H

[RP710]

Application: Airborne Radar

Power Input: 115 volts RMS/400 hertz
Power Output: 17 kilovolts, 5800 watts
Ripple: 500 volts maximum
Dimensions: 6.28"W x 3.14"D x (3.5 – 0.54)"H

[RP795]

Application: Air Traffic Control Radar

Power Input: 115 volts RMS, 400 hertz
Power Output: 1: -6.3 VRMS @ 0.6 amps isolation 10 KVRMS to GND
2: -9500 volts DC @ 2 milliamps
3: -550 volts DC @ 2 milliamps
4: -6.3 VRMS @ 0.6 amps isolation 7KVRMS to GND
Dimensions: 5.75"W x 3.03"D x 4.25"H

[RP579]

Application: Airborne Radar

Power Input: 115/208 volts, 400 hertz
Power Output: 5.5 kilovolts @ 220 milliamps
Dimensions: 6"W x 7³/₄"D x 3¹/₈"H

[RP925]

Application: Mobile Ground-Based Radar

Power Input: 212 volts RMS, 5 kilohertz
Power Output: 46 kilovolts DC @ 40 milliamps
Dimensions: 16²¹/₆₄"W x 11²¹/₆₄"D x 17"H

[RP999]

Application: Ground-Based Radar

Power Input: 225 volts, 10 kilohertz (square wave), 10 amps
Power Output: 9 kilovolts DC @ 0.2 amps, with 0.1 UF capacitor
Dimensions: 9.75"W x 8"D x (13 + 3)"H



[RP814]

Application: Mobile TWT Power Supply

Features solid-state, high-efficiency volt and current monitoring test points, high-voltage oil section, low-voltage compartment, cooling fans, and DC-to-DC converter.

Power Input: 27 to 31 volts DC
 Beam Output
 Voltage: -9.3 to -11.3 kilovolts DC
 Current: 0.013 amps, 1.3 maps peak
 Ripple: 1 percent P-P
 Line Regulation: 100 volts P-P
 Bias Output
 Voltage: 150 volts DC \pm 1 volt DC @ 5 milliamps
 Ripple 0.25 percent P-P
 Regulation: 0.5 percent load or line
 Filament Supply: -6.3 volts DC @ 1.5 amps (surge 3.4 amps maximum)
 Ripple: 80 millivolts P-P maximum
 Regulation: 0.5 percent line
 Dimensions: 4³/₄"W x 14.5"D x (5¹/₂+2)"H

[RP1048]

Application: Ground-Based TWT Power Supply

Power Input: 410 volts peak-to-peak square wave, 25 kilohertz
 Power Output: Cathode: -42 kilovolts @ 0.76 amps
 Collector: -22 kilovolts @ 0.59 amps
 Regulating Voltage: +8 kilovolts
 Dimensions: 15"W x 11"D x 10"H

MULTI-OUTPUT TWT POWER SUPPLY

HIGH VOLTAGE CRT POWER SUPPLY

Model #1040-WES
 Model #1040-183
 Model #1040-186
 Model# 1040-201

LOW VOLTAGE POWER SUPPLY

Model # 1040-131-1
 Model # 1040-132
 Model # 1040-167



RFI/EMC NOISE SUPPRESSION FILTERS FOR 5, 10, & 15 Amp CIRCUITS

A-300 Series

Part Numbers

A-301	A-303	A-305	A-307	A-309
A-302	A-304	A-306	A-308	

RFI/EMI SUPPRESSION FILTERS FOR 5 TO 45 Amp CIRCUITS

5B115 Series

Part Numbers

5B114	5B116
6B115	6B113
7B118	7B108
5B121	
6B109	
7B111	

SECURE COMMUNICATIONS & SIGNAL LINE FILTERS FOR TELEPHONE, TELETYPE AND DIGITAL COMMUNICATIONS INSTALLATIONS

AFT Series

Part Numbers

A-1000	A-1800
A-1100	A-1900
A-1200	A-2000
A-1300	A-2100
A-1400	A-2200
A-1500	A-2300
A-1600	A-2400
A-1700	A-2600

RF NOISE FILTERS

MIL-STD-461

HIGH VOLTAGE CONVERTER AND GRID MODULATOR

Model 1040-164

Model 1040-140



SOME OLDER RADARS SUPPORTED :

A/N APS-128 (and the variation SAR-1), Manufactured by Eaton-AIL

Magnetron	P/N 412137-1	Tx/Rx Assy.
Magnetron	P/N 420738-1	Tx/Rx Assy.
Pulse Unit (Modulator)	P/N 411832-1	Modulator Assy. 415007
Azimuth Motor (Azimuth)	P/N 411763-1 & P/N 411763-2	Antenna Assy. 412505
Azimuth Motor (Elevation)	P/N 411766-1	Antenna Assy. 412505
Thyratron	P/N 7665/MIL-E1/1636	Tx/Rx Assy.
Local Oscillator	P/N 429902-2	Tx/Rx Assy.
Switch Press	P/N 12359	Tx/Rx Assy.
Relay K3	P/N J422-26WL	Disc. Board Assy. 420328
Relay K1, K2, K4 & K5	P/N J412-26W	Disc. Board Assy. 420328
Power Divider	P/N DS-109	Disc. Board Assy. 420328
Balance Mixer	P/N MD-139	Disc. Board Assy. 420328
Relay K1	P/N M19648/1-157	Power Control Relay Assy. 413656
Relay K2	P/N 408521-1	Power Control Relay Assy. 413656
Relay K3	P/N MS27400-1	Power Control Relay Assy. 413656
Relay K4 & K5	P/N M5757/23/002	Power Control Relay Assy. 413656
Relay K6 & K7	P/N M39016/6-107	Power Control Relay Assy. 413656
Diode	P/N DD1004M1	RF Head Assy. 415011
Diode	P/N DD1005	RF Head Assy. 415011
Sr/Br Blk Assy	P/N 413345-1	Antenna Assy. 412505
Servo Amp (Elevation)	P/N 411765-2	Antenna Assy. 412505
Servo Amp (Azimuth)	P/N 411765-1	Antenna Assy. 412505
Synchro Transmitter	P/N M20708/8C-001	Antenna Assy. 412505
Rotary Joint (Azimuth)	P/N 411513-1	Antenna Assy. 412505
Rotary Joint (Elevation)	P/N 413322-1	Antenna Assy. 412505
Transformer	P/N 408520-1	Electronic Box Assy. 413091
Transformer	P/N 408518-2	Electronic Box Assy. 413091
High Voltage	P/N 413772-1	Operator Display Assy. 412507
Relay	P/N M5757/10-007	Operator Display Assy. 412507
IC	P/N HA2-2520	Mixer/Multiplexer Assy. 413659
IC	P/N SN-5400J	Gate Generator Assy. 413620
IC	P/N SN-54153J	Gate Generator Assy. 413620
IC	P/N DG126AP	Ground Stabilization Assy. 413606
IC	P/N SN5408J	Ground Stabilization Assy. 413606
IC	P/N LM139D	Mode Control Assy. 418484
IC	P/N SN5404J	Ground Stabilization Assy. 413606
Deflection Amp.	P/N 408547-1	Deflection Amplifier Assy. 413895
Filter Assembly	P/N 1718250-501 & 1718250-502	
Resistor	P/N 1715088-503	
Switch	P/N 1718132-2	
Transformer	P/N 1712209-1	
Choke	P/N 1712430-1	
IC	P/N 1711488-1	