

DATE 24 July 69

SH. 1 OF 1

TMC

SPECIFICATION NO. S10191-1

COMPILED BY
J. G. Parkin

TITLE: AMC-21B Individual Equipment Specification

JOB

APPROVED *[Signature]*

Number of Outputs:	From 2 to 16 in increments of 2
Frequency Range:	100 KHz to 32 MHz
Input and Output Impedance:	Either 50 ohms or 75 ohms (fixed) with a VSWR better than 1.5:1 (filter out)
Insertion Gain:	2 db \pm 1 db
Desensitization	A 100 uv signal at 25 MHz is compressed by 3 db max. when a 2V RMS signal between 2 to 6 MHz is applied simultaneously.
Noise Figure:	7 db maximum
Intermodulation:	Second and third order products better than 60 db below two half-volt (open circuit) signals within the operating range.
Isolation:	Better than 50 db output-to-input Better than 60 db output-to-output
Phase correlation:	$\pm 1^\circ$ between outputs
Power supply:	115V or 220V AC 50/60 Hz. Power consumption approximately 25 watts (16 outputs)
Dimensions:	Height - 3 1/2" Width - 19" Depth - 14"
Weight:	25 lb. approximately
MTBF:	Better than 20,000 hours as per RADC Handbook

The AMC-21B Multicoupler is a commercial unit designed to TMC specifications and current acceptable engineering practice.

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COMPILED BY
J. G. Parkin

TMC SPECIFICATION NO. S10191-2

TITLE: AMC-8 Individual Equipment Specification

JOB

APPROVED *J. G. Parkin*

Temperature Range:

Class 4 military requirements,
operating 0° to 50°C
non-operating -62° to +75°C

Humidity:

Operational up to 95%

The AMC-8 Multicoupler has been designed to meet all requirements for military use as defined in MIL-E-16400F, and SHIPS-C-4297 (as amended by RCA Document A1815402).

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COMPILED BY
J. G. Parkin

TMC SPECIFICATION NO. S10191-3

TITLE: AMC-32 Individual Equipment Specification

JOB

APPROVED

Number of Outputs: 32

Frequency Range: 2 to 32 MHz

Input and Output Impedance: 75 ohms with a VSWR better than 1.5:1

Insertion Gain: 2 db \pm 1 db

Desensitization: 100 uv signal at 25 MHz is compressed by 3 db maximum when an 8v peak-to-peak signal between 2 to 6 MHz is applied simultaneously.

Noise Figure: 7 db maximum

Intermodulation: With two 0.5 volts rms input signals (referenced to 75 ohms)

2nd order products are:

- (1) -60 db when both input signals and the product signal are between 2 to 20 MHz;
- (2) -55 db when either or both input signals or the product signal are above 20 MHz.

3rd order products are:

- (1) -65 db when both input signals and the product signal are between 2 to 25 MHz;
- (2) -60 db when either or both input signals or the product signal are above 25 MHz.

Isolation: -40 db, minimum, output-to-output
-55 db, minimum, output-to-input

Line Filters: -40 db minimum attenuation between 14 KHz to 150 MHz

Power Supply: 115 vac \pm 6% 48/62 Hz; power consumption approximately 80 watts

Dimensions: Width - 19 inches
Height - 3-1/2 inches
Depth - 16 inches

Weight: 17 pounds approximately

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TMC SPECIFICATION NO. S 10191-3

COMPILED BY
J. G. Parkin

TITLE: AMC-32 Individual Equipment Specification

JOB

APPROVED

MTBF:

20,000 hours as per RADC reliability handbook

Temperature Range:

Class 4 military requirements
Operating: 0° to +50°C
Non-operating: -62° to +75° C

Humidity:

Operational up to 95%

The AMC-32 Multicoupler has been designed to meet all requirements for military use as defined in MIL-E-16400F and SHIPS-C-4297 (as amended by RCA Document A1815403).

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TMC SPECIFICATION NO. S10191-5

COMPILED BY
J. G. Parkin

TITLE: MAC-1 Individual Equipment Specification

JOB

APPROVED

Number of Inputs:	Eight
Number of Outputs:	One
Frequency Range:	2 MHz to 32 MHz
Input and Output Impedance:	75 ohms with a VSWR better than 1.5:1
Insertion Gain:	2 db \pm 1 db
Desensitization:	100 uv signal at 25 MHz is compressed 3 db maximum when an 7v peak-to-peak signal between 2 to 6 MHz is applied simultaneously
Noise Figure:	16 db maximum
Phase Correlation:	$\pm 2^\circ$ between inputs
Intermodulation:	second and third order products better than 65 db below two half-volt (referenced to 75 ohms) signals applied within the operating range
Isolation:	40 db input-to-input 55 db output-to-input
Line Filters:	40 db attenuation between 14 KHz and 150 KHz
Power Supply:	115V \pm 6%, 48/62 Hz; power consumption approximately 30 watts
Dimensions:	Width - 19 inches Height - 3-1/2 inches Depth - 16 inches
Weight:	16 pounds approximately
MTBF:	20,000 hours as per RADC handbook
Temperature Range:	Operating 0° to $+50^\circ\text{C}$ Non-operating -60° to $+75^\circ\text{C}$
Humidity:	Operation to 95%RH

The MAC-1 multiantenna coupler has been designed to meet all requirements for military use as defined in MIL-E-16400F and SHIPS-C-4297 (as amended by RCA Document A1815404).