



21-80-34
UHF-FM/L-Band
Diplexer
700-870/960-1220 MHz

FEATURES

- **High isolation, passive device allows simultaneous operation of closely spaced frequency bands.**
- **No tuning or switching required**
- **Allows common wideband antennas to be used for P25/UHF-FM and Tacan, Link16, IFF or MIDS.**
- **1 dB insertion loss typical**
- **Rugged design to meet MIL-STD-810**
- **Fully sealed for high reliability**



The 21-80-34 diplexer is designed to allow a common wideband antenna port to be used simultaneously with UHF-FM and L-Band systems.

In particular, when used with Cooper Antennas 21-150-21 p-i-n diode tuned antenna it can allow latest wideband 30-870 MHz radios such as ARC210 GEN5 to be used simultaneously with IFF, Tacan or Link16 systems all connected to just a single antenna. This diplexer thus allows many current 30-400 MHz and L-Band antennas to be directly replaced by the 21-150-21 to provide full 30-512/700-870/960-1220 MHz operation with no loss of performance and requiring no airframe modification.

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Cooper Antennas Ltd is Accredited to: ISO9001, AS9100, ISO14001 and MAA Approved

SPECIFICATIONS

Cooper Antennas Model 21-80-34

UHF-FM/L-Band Diplexer

ELECTRICAL

Frequency	700 to 870/960 to 1220 MHz
Impedance	50 Ohms nominal
Insertion Loss	≤ 1 dB typical*
VSWR	≤ 1.5:1 max*
Isolation	≥ 65 dB*
Power Handling	100 Watts peak 25 Watts average
Connectors	2 N type Female (Common and L-Band) 1 TNC Female (UHF)
	*See diagram for typical performance thru band

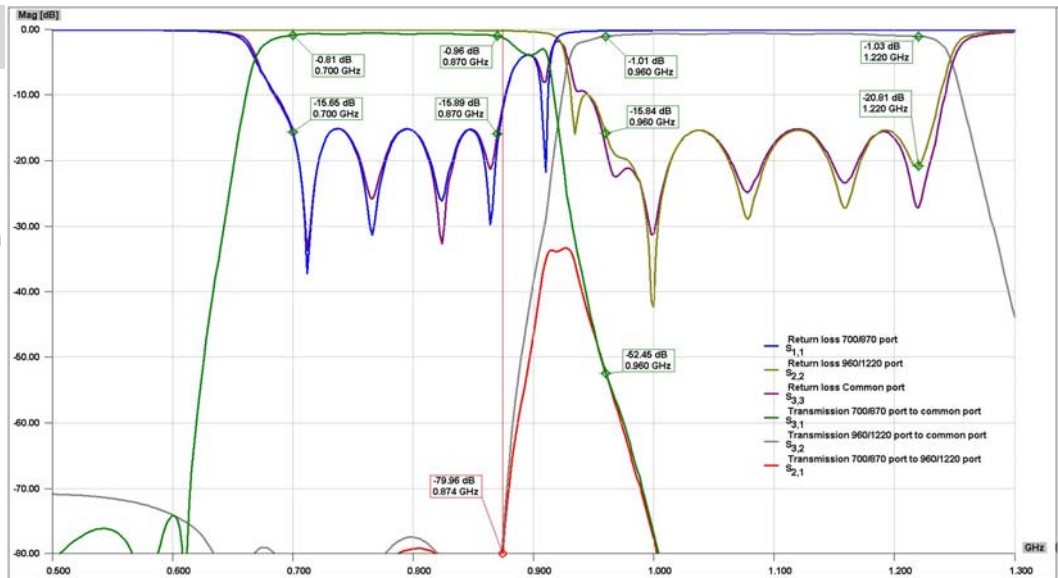
MECHANICAL

Dimensions	6.3" x 3.5" x 2" (160 x 90 x 53 mm) max (excluding connectors and mounting flange)
Weight	3.86 lbs (1.75kg)
Mounting Holes	4 x 0.20" hole

FINISH

Lusterless Black

Other finish options are available. Please specify finish required when ordering.



Typical Diplexer Performance

Note: Cooper Antennas Ltd has a policy of continuous product improvement and data herein is therefore subject to change. Please check with Cooper Antennas Ltd that this data sheet is at latest issue before initiating contract activity.