

DM CNI8



The DM CNI 8-Series offers a rugged, high performance UHF/L-Band antenna system currently in use on the A6, A10, A37, CP140, E3, F14, F15, F16, F18, F111, P3, S3, and other aircraft.

The system provides capability for simultaneous operation of UHF communications, IFF, TACAN and Data Link through a single antenna.

The blade system provides dual band omnidirectional coverage. It is composed of a high strength fiberglass housing and an aluminum base casting to withstand the severe supersonic environment. Integral, as well as remote diplexer configurations are available.

The antenna has been in constant use since 1971 with no known field failures or problems of any kind reflecting on its reliability.

MULTIFUNCTION ANTENNAS

DM CNI8 SERIES
UHF/L-BAND ANTENNA SYSTEM

SPECIFICATIONS

ELECTRICAL	Frequency Range	DM CNI8-4/D, DM CNI8-6, DM CNI8-7 DM CNI8-9, DM CNI8-10/A DM CNI8-8, DM CNI8-11/A DM CNI8-12	225 – 400 MHz 950 – 1220 MHz 225 – 400 MHz 950 – 1220 MHz 225 – 420 MHz 950 – 1220 MHz
	VSWR	DM CNI8-4/D, DM CNI8-6	225 – 275 MHz 2.2:1 275 – 400 MHz 2.0:1 950 – 1220 MHz 2.0:1
		DM CNI8-7	225 – 250 MHz 2.5:1 250 – 400 MHz 2.0:1 950 – 1220 MHz 2.0:1 1000 – 1100 MHz 1.8:1
		DM CNI8-8, DM CNI8-11/A	225 – 400 MHz 2.0:1 960 – 1220 MHz 2.0:1 1000 – 1100 MHz 1.8:1
		DM CNI8-9, DM CNI8-10/A	225 – 400 MHz 2.0:1 950 – 1220 MHz 2.0:1 1000 – 1100 MHz 1.8:1
		DM CNI8-12	225 – 400 MHz 2.0:1 950 – 1220 MHz 2.0:1 1000 – 1100 MHz 1.8:1
	Gain		Within 0.75 dB of 1/4 λ Stub
	Power		See Table 1
	Isolation		See Table 1
	Weight	DM CNI8-4, D, DM CNI8-6 DM CNI8-7, DM CNI8-8, DM CNI8-9 DM CNI8-10/A, DM CNI8-11/A, DM CNI8-12	22 oz max (0.624 kg) (35 oz with diplexer) 35 oz max (1 kg)

TABLE 1

	DM CNI8-4/D	DM CNI8-6	DM CNI8-7	DM CNI8-8	DM CNI8-9	DM CNI8-10/A	DM CNI8-11/A	DM CNI8-12
Isolation (dB)	85	85	50	50 UHF/ L-Band 70 L-Band/ UHF	50	50	50 UHF/ L-Band 70 L-Band/ UHF	50
Remote Diplexer	FM34-2	FM34-1	INTEGRAL DIPLEXER					
*Power (UHF)	45 W CW	50 W CW	45 W CW	15 W CW	100 W CW	100 W CW	150 W CW	100 W CW
(L-Band) Average Peak	4 W 4.0 kW	4 W 4.0 kW	3.5 W 2.5 kW	12 W 3.0 kW	5 W 3.5 kW	3.5 W 3.5 kW	16 W 4.0 kW	2 W 2.5 kW
Flies on Aircraft	AWACS CL215 A10	F14 C101 KFIR	F16	F18	S3-A P3-C CP140	A6 F4 F111	F15	A37 T37

***NOTE:** Present power specifications are current customer requirements. Antennas handle higher power without any design change.

SPECIFICATIONS (CONTINUED)

Diplexer	See Table 1
Connector	See Mounting Dimensions
Environment	Exceeds MIL-E-5400

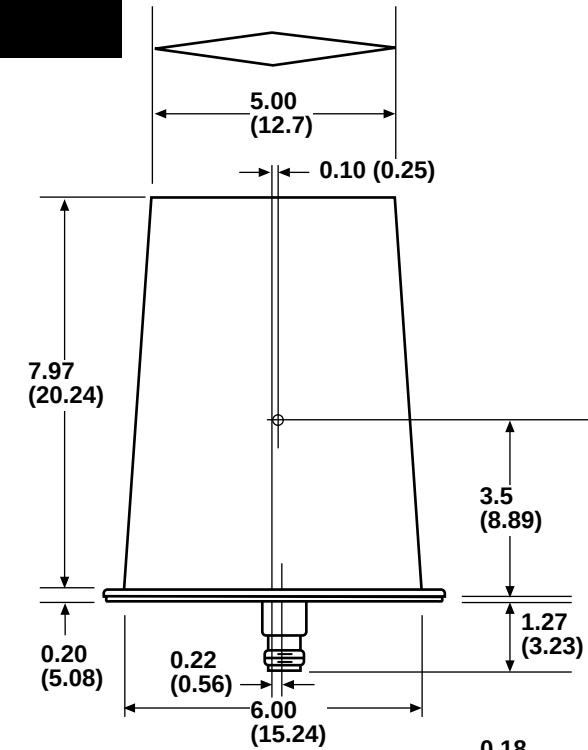
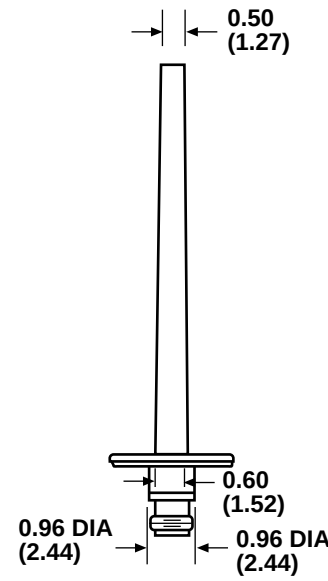
MULTIFUNCTION ANTENNAS

DM CNI 8 SERIES UHF/L-BAND ANTENNA SYSTEM

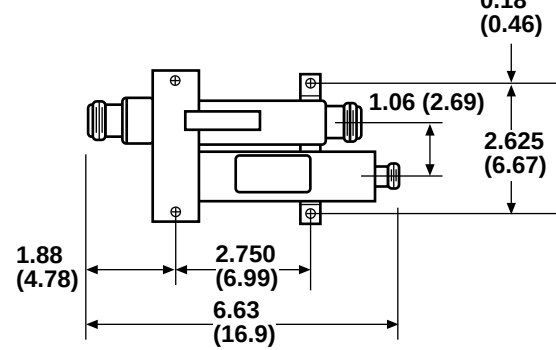
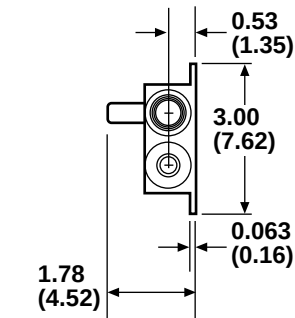
OUTLINE DIMENSIONS

Inches (Centimeters)

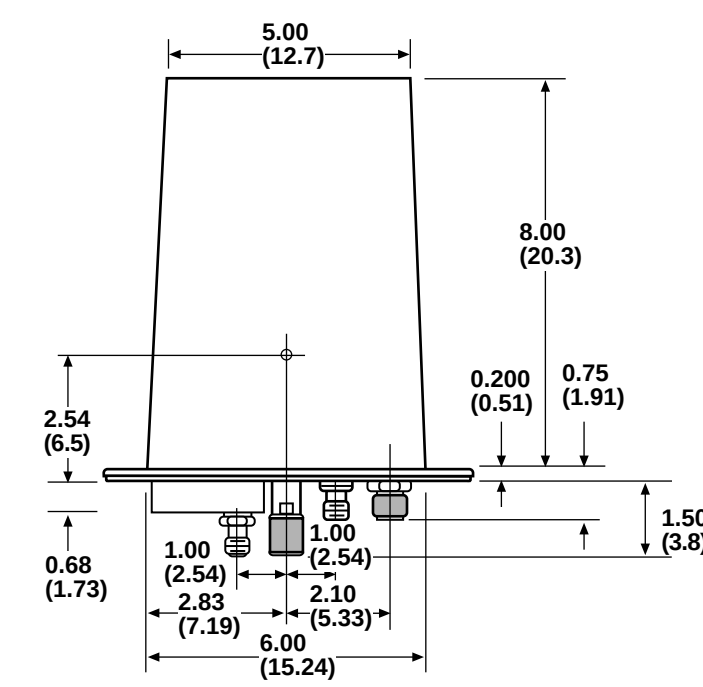
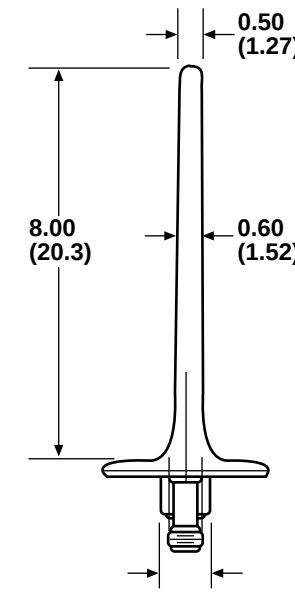
DM CNI8-4/D
(Representative of
remote diplexer
models)



DM FM 34 Diplexer
(For use with
DM CNI8-4/D and
DM CNI8-6)

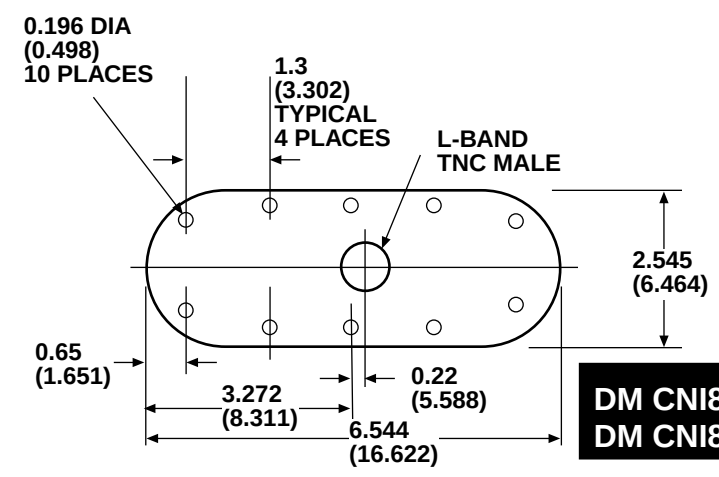


DM CNI8-10/A
(Representative of
integral diplexer
models, including
test probes)

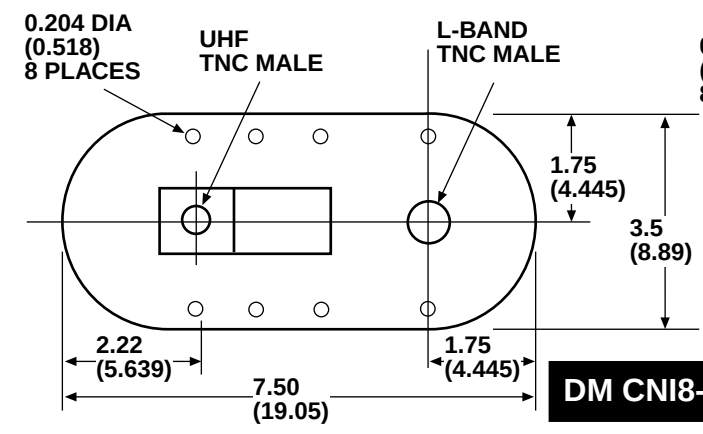


Notes:

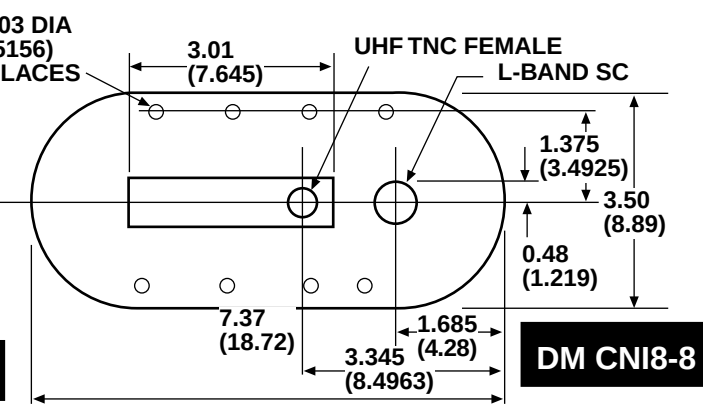
1. SC connectors are Female, MIL-C-39012.
2. All mounting holes are CSK 100° x 0.385 (0.9779) DIA except where shown.



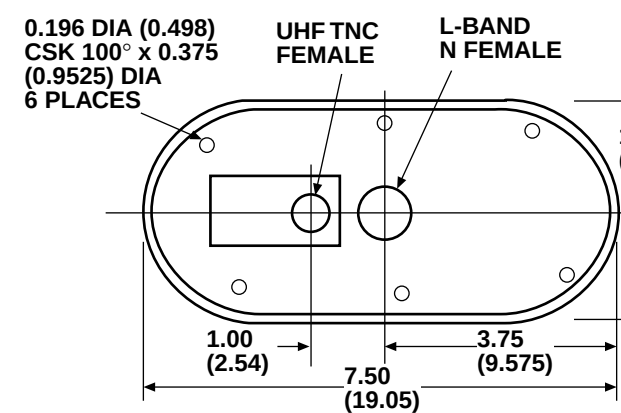
DM CNI8-4/D
DM CNI8-6



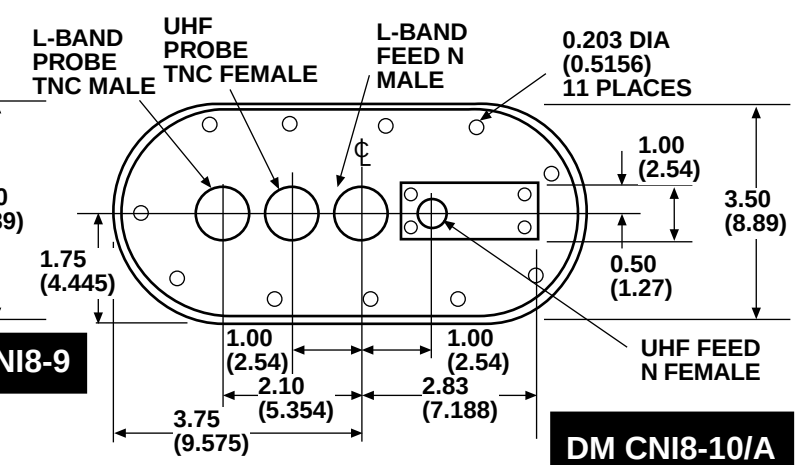
DM CNI8-7



DM CNI8-8

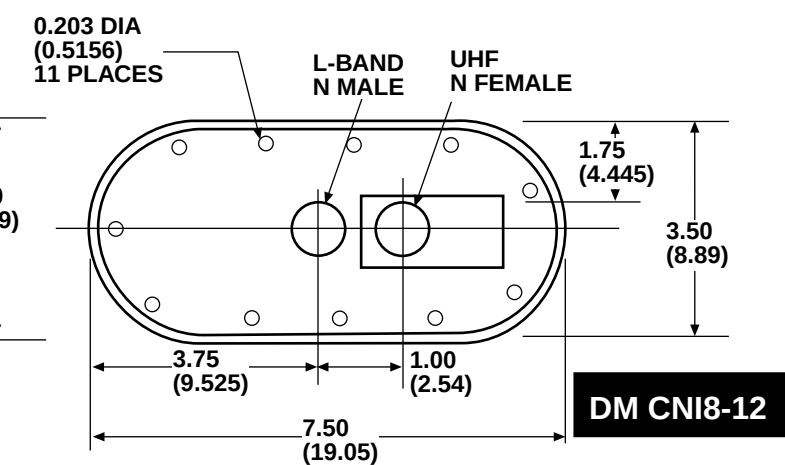
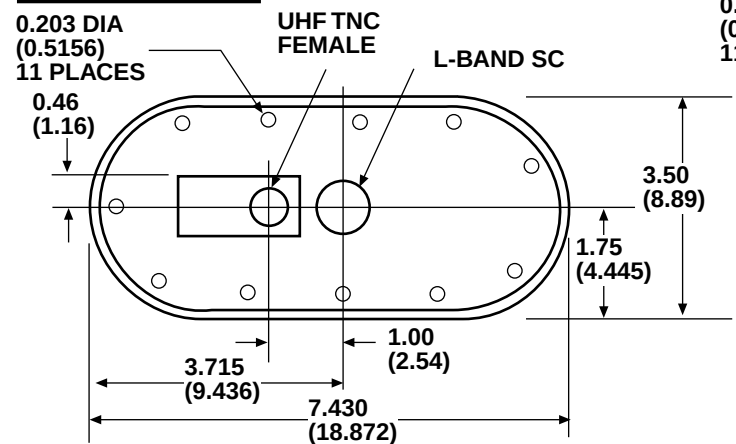


DM CNI8-9



DM CNI8-10/A

DM CNI8-11/A



DM CNI8-12