

FREQUENCIES
M1/2/5 OR M3/4/6

DDL™ DIGITAL DATA LINK™






AeroVironment's Digital Data Link (DDL) is a small, lightweight, broadband digital network module enabling enhanced command and control of small UAS. DDL is IP-based, allowing maximum flexibility and interoperability between small airborne and ground systems with limited power and bandwidth to maximize the number of systems that can operate in a given area. DDL is compatible with AeroVironment's network connectivity solutions and antennas, providing command and control ranges that extend from the wearable, short-range pDDL (5 km) to the Long Range Tracking Antenna (60 km).

Maximum Flexibility and Interoperability










SPECIFICATIONS (MODULES)

MINI DDL MODULE

SIZE	1.95 in x 2.35 in x 0.35 in (49 mm x 59 mm x 8.9 mm)	    
WEIGHT	0.99 oz (28 g)	
TX POWER	2 W	
RX SENSITIVITY	-93 dBm	
POWER CONSUMPTION	9 W at 1 W TX	
OPERATING VOLTAGE	5.5-16 V	
DATA RATE	4.5 Mbps	
INTERFACES	LVDS/USB	
OPERATING BANDS	M1/2/5 or M3/4/6	

BASE DDL MODULE

SIZE	2.05 in x 5 in x 0.375 in (52 mm x 127 mm x 9.5 mm)	      
WEIGHT	2.1 oz (60 g)	
TX POWER	1 W	
RX SENSITIVITY	-93 dBm	
POWER CONSUMPTION	10 W at 1 W TX	
OPERATING VOLTAGE	5.5-9 V	
DATA RATE	4.5 Mbps	
INTERFACES	Ethernet/RS-232/RS 485/USB	
OPERATING BANDS	M1/2/5 or M3/4/6	

SPECIFICATIONS (ANTENNAS)



pDDL
Short Range Antenna



STANDARD RANGE ANTENNA



ERA
Extended Range Antenna



LRTA
Long Range Tracking Antenna

	pDDL Short Range Antenna	STANDARD RANGE ANTENNA	ERA Extended Range Antenna	LRTA Long Range Tracking Antenna
DEPLOYED ANTENNA SIZE & WEIGHT	4 in x 2.25 in x 0.75 in (10.2 cm x 5.7 cm x 1.9 cm) Weight: 7.1 oz (201 g)	Height: 6.5 ft (2 m) Base Diameter: 3 ft (0.9 m) M1/2/5 and M3/4/6 weight: 3 lb (1.3 kg)	Height: 4.25-7 ft (1.3-2.2 m) Base Diameter: 3.75-8.2 ft (1.1-2.5 m) Weight: 10.8 lb (4.9 kg) <i>Note: excludes the GCS RF Head, hub and system battery</i>	M1/2/5 height: 5.8-9.4 ft (1.8-2.9 m) M3/4/6 height: 5.25-8.8 ft (1.6-2.7 m) Base Diameter: 5.3 ft (1.6 m) M1/2/5 weight: 304 lb (138 kg) M3/4/6 weight: 300 lb (136 kg)
ANTENNA ARRAY UNIT SIZE & WEIGHT	--	M1/2/5: 4.4 in x 2.8 in x 10.1 in (11.2 cm x 7.1 cm x 25.7 cm) M3/4/6: 4.4 in x 2 in x 10.1 in (11.2 cm x 5.1 cm x 25.7 cm) M1/2/5 and M3/4/6 weight: 1.6 lb (732 g)	12.25 in x 12.25 in x 5 in (31.1 cm x 31.1 cm x 12.7 cm) Weight: 3.7 lb (1.7 kg) <i>Note: Used in conjunction with the Standard Range Antenna</i>	--
RX SENSITIVITY	-98 dBm @ 2 Mbps -93 dBm @ 6 Mbps	-98 dBm @ 2 Mbps -93 dBm @ 6 Mbps	-98 dBm @ 2 Mbps -93 dBm @ 6 Mbps	-98 dBm @ 2 Mbps -93 dBm @ 6 Mbps
POWER CONSUMPTION	9 W	20 W	20 W (pass through, not additional)	275 W (nom., heater off) 460 W (max., heater on)
OPERATING VOLTAGE	5.5-16 V	5.5-16 V	5.5-16 V	90-250 V ac, 47-65 Hz
DATA RATE	4.5 Mbps	4.5 Mbps	4.5 Mbps	4.5 Mbps
SUPPORTED COMPRESSION	MPEG2 or H264 SD	MPEG2 or H264 SD	MPEG2 or H264 SD	MPEG2 or H264 SD
INTERFACES	USB	Ethernet/RS-232/RS-485	Ethernet/RS-232/RS-485	Ethernet/RS-232/RS-485
ENCRYPTION	AES-128/AES-256	AES-128/AES-256	AES-128/AES-256	AES-128/AES-256
OPERATING BANDS	M1/2/5 or M3/4/6	M1/2/5 or M3/4/6	M1/2/5 or M3/4/6	M1/2/5 or M3/4/6