

Video and Data Transceiver

Tellumat

DL-5200



The DL-5200 is a small SwaP optimized data link for use on small to medium UAS systems. The DL-5200 provides the primary bidirectional command and control datalink as well as real time video streaming from the unmanned vehicle.

The DL-5200 is both ethernet and serial enabled to interface to a wide range of UAV flight and payload control systems.

Applications:

UAV command and control up to 25 km

Payload video relay

FEATURES

Size weight and power (SwaP) optimised. The DL-5200 weighs 480g and consumes less than 12 W.

Wide range 12V to 32V input supply

PAL composite video input with low latency multirate 264 video encoding and IP multicast streaming

2 ethernet 10/100 base T interfaces

2 full duplex serial interfaces

Audio & microphone interface

BENEFITS

Ultimately the smaller the SwaP of the datalink, the longer the endurance of the UAV. The small size, mass and low power requirements allows for simplified mounting in the UAV.

Unit will operate directly from a range of typical UAV alternator or battery supplies.

No external video encoder required in the UAV. No dedicated video hardware required on the ground side to view the video.

Flexible ethernet communications between the UAV components are enabled with the DL-5200 built in ethernet switch. In turn, this allows for the UAV system to be configured and managed as a network node.

Allows direct interfacing to and control of serial devices. RS232 and RS485 are supported

Interface directly to the analogue audio interface on an ATC radio in the UAV.

LINK

Frequency Band	ISM C-Band 5.8 GHz
Modulation	802.11 n
Gross data rate	6 Mbps

Transmitter Characteristics:

Number of channels	12
Output power (Max)	+26 dBm

Receiver Characteristics:

Dynamic range	-70 dB
Sensitivity	-102 dBm



INTERFACES

Video	1 x Composite video input (CVBS)
Data / Control / Status	3 x 115 kb/s RS 232 or 1x RS232 + 1x RS485 (selectable)
Ethernet	2 x 100 Base-T
Audio	1 x Bidirectional 8kHz audio channels PTT



PHYSICAL CHARACTERISTICS

Mass	480 g
Dimensions	156 mm x 97 mm x 40 mm (h x w x d)
Mounting	No special thermal requirements. M3 threaded holes (top and bottom)

POWER REQUIREMENTS (AIRBORNE UNIT)

Input voltage	12 V DC to 32 V DC < 15 W
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ENVIRONMENTAL (AIRBORNE AND GROUND UNITS)

Temperature range	-20°C to +71°C
General	MIL-STD-810G
EMC	MIL-STD-461D / MIL-STD-462D



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