

Micro Air Vehicle Link (MAVLink) is a protocol for communicating with small unmanned vehicles. It is designed as a header-only message marshaling library.

It is mostly used for communication between a ground control station (GCS) and unmanned vehicles and in the inter-communication of the subsystem of the vehicle.

## Packet structure

Field name	Index (bytes)	Purpose
Start-of-frame	0	Denotes the start of frame transmission
Payload-length	1	Length of payload (n)
Incompatibility flags	2	Flags that must be understood for MAVLink compatibility
Compatibility flags	3	Flags that can be ignored if not understood
Packet sequence	4	Each component counts up their send sequence. Allows for detection of packet loss
System ID	5	Identification of the SENDING system. Allows to differentiate systems on the same network
Component ID	6	Identification of the SENDING component. Allows to differentiate different components of the same system, e.g. the IMU and the autopilot
Message ID	7-9	Message identification - defines what the payload means and how it should be correctly decoded
Payload	10 - (n+10)	The data into the message, depends on the message id
CRC	(n+11) - (n+12)	Check-sum of the entire packet, excluding the packet start sign
Signature	(n+13) - (n+25)	Signature to verify messages originate from trusted source