

OlliW MAVLink augmented OpenTX LUA function reference, detailed edition (rev. 1.1 based on v26 firmware)

March 21st, 2021

General OpenTX LUA additions are to be called directly - example: `getEvent()`, MavSDK library function calls need to be prepended with `mavsdk` and a dot - example: `mavsdk.mavtelemisEnabled()`
 Getters are listed in blue, setters in green.

	General OpenTX LUA additions	return value / parameter	Unit	Internal C++ function/wrapper	Value stems internally from or calls function(s)	MAVLink message	MAVLink msg field(s)	Data type & unit	Comments
Generic	<code>getEvent</code>	<code>value[integer][event]</code>	enum, see keys.h	<code>luaGetEvent</code>	<code>s_evt</code> sets <code>s_evt_lockmask</code> , allows only ENTER, MODEL, EXIT, TELEM, RADIO to be locked	-	-	-	returns only locked keys and rotary events
	<code>lockKeys</code>	<code>value[unsigned][mask]</code>	-	<code>luaLockKeys</code>	clears <code>s_evt_lockmask</code>	-	-	-	gets set for max 500ms, OpenTX internal setting
	<code>unlockKeys</code>	-	-	<code>luaUnlockKeys</code>	true if <code>menuLevel > 0</code>	-	-	-	OpenTX internal setting
	<code>isInMenu</code>	<code>value[bool]</code>	-	<code>luaIsInMenu</code>	-	-	-	-	OpenTX internal setting
MavSDK function									
	return value / parameter	Unit	MavSDK internal C++ function/wrapper	Value stems internally from or calls function(s)	MAVLink message	MAVLink msg field(s)	Data type & unit	Comments	
Generic 1	<code>mavtelemisEnabled</code>	<code>value[bool]</code>	-	<code>luaMavsdkMavTelemisEnabled</code>	<code>g_eeGeneral.auxSerialMode</code> <code>g_eeGeneral.aux2SerialMode</code>	-	-	-	OpenTX radio SYSTEM settings check
	<code>isReceiving</code>	<code>value[bool]</code>	-	<code>luaMavsdkIsReceiving</code>	<code>mavlinkTelem.isReceiving()</code>	all except RADIO_STATUS	-	-	Any when <code>compid == autopilot.compid</code> and all requests done
Generic 2	<code>isInitialized</code>	<code>value[bool]</code>	-	<code>luaMavsdkIsInitialized</code>	<code>mavlinkTelem.autopilot.is_receiving</code> <code>mavlinkTelem.autopilot.is_initialized</code> <code>OWVERSIONONLYSTR</code>	-	-	-	Constant in <code>opentx.h</code> , e.g. "v22" or "v22rc01"
	<code>getVersion</code>	<code>value[string]</code>	-	<code>luaMavsdkMavTelemVersion</code>	-	-	-	-	-
Generic 2	<code>getAutopilotType</code>	<code>value[number]</code>	enum MAV_AUTOPILOT	<code>luaMavsdkGetAutopilotType</code>	<code>mavlinkTelem.autopilottype</code>	#0 HEARTBEAT	autopilot	uint8_t [enum]	-
	<code>getVehicleType</code>	<code>value[number]</code>	enum MAV_TYPE	<code>luaMavsdkGetVehicleType</code>	<code>mavlinkTelem.vehicletype</code>	#0 HEARTBEAT	type	uint8_t [enum]	-
	<code>getFlightMode</code>	<code>value[number]</code>	enum PLANE_MODE or COPTER_MODE or SUB_MODE or ROVER_MODE or TRACKER_MODE	<code>luaMavsdkGetFlightMode</code>	<code>mavlinkTelem.flightmode</code>	#0 HEARTBEAT	custom_mode	uint32_t [enum]	enum type depends on vehicle type
	<code>getVehicleClass</code>	<code>value[number]</code>	enum MAV_TYPE	<code>luaMavsdkGetVehicleClass</code>	<code>mavlinkTelem.vehicletype</code>	#0 HEARTBEAT	type	uint8_t [enum]	-
	<code>getSystemStatus</code>	<code>value[number]</code>	enum MAV_STATE	<code>luaMavsdkGetSystemStatus</code>	<code>mavlinkTelem.autopilot.system_status</code>	#0 HEARTBEAT	system_status	uint8_t [enum]	-
	<code>isArmed</code>	<code>value[bool]</code>	-	<code>luaMavsdkIsArmed</code>	<code>mavlinkTelem.autopilot.is_armed</code>	#0 HEARTBEAT	base_mode	uint8_t [enum]	-
Generic 2	<code>getSystemStatusSensors</code>	table (present[number], enabled[number], health[number]) or nil	bitmap MAV_SYS_STATUS_SENSOR bitmap MAV_SYS_STATUS_SENSOR bitmap MAV_SYS_STATUS_SENSOR	<code>luaMavsdkGetSystemStatusSensors</code>	<code>mavlinkTelem.sysstatus.sensors_present</code> <code>mavlinkTelem.sysstatus.sensors_enabled</code> <code>mavlinkTelem.sysstatus.sensors_health</code>	#1 SYS_STATUS #1 SYS_STATUS #1 SYS_STATUS	onboard_control_sensors_present onboard_control_sensors_enabled onboard_control_sensors_health	uint32_t [bitmap] uint32_t [bitmap] uint32_t [bitmap]	returns nil if not <code>mavlinkTelem.sysstatus.received</code>
	<code>getAttRollDeg</code>	<code>value[number]</code>	°	<code>luaMavsdkGetAttRollDeg</code>	<code>mavlinkTelem.att.roll_rad * 180/PI</code>	#30 ATTITUDE	roll	float [rad]	-PI to +PI
IMU	<code>getAttPitchDeg</code>	<code>value[number]</code>	°	<code>luaMavsdkGetAttPitchDeg</code>	<code>mavlinkTelem.att.pitch_rad * 180/PI</code>	#30 ATTITUDE	pitch	float [rad]	-PI to +PI
	<code>getAttYawDeg</code>	<code>value[number]</code>	°	<code>luaMavsdkGetAttYawDeg</code>	<code>mavlinkTelem.att.yaw_rad * 180/PI</code>	#30 ATTITUDE	yaw	float [rad]	-PI to +PI
Vfr	<code>getVfrAirSpeed</code>	<code>value[number]</code>	m/s	<code>luaMavsdkGetVfrAirSpeed</code>	<code>mavlinkTelem.vfr.airspd_mps</code>	#74 VFR_HUD	airspeed	float [m/s]	-
	<code>getVfrGroundSpeed</code>	<code>value[number]</code>	m/s	<code>luaMavsdkGetVfrGroundSpeed</code>	<code>mavlinkTelem.vfr.groundspd_mps</code>	#74 VFR_HUD	groundspeed	float [m/s]	-
	<code>getVfrAltitudeMsl</code>	<code>value[number]</code>	m	<code>luaMavsdkGetVfrAltitudeMsl</code>	<code>mavlinkTelem.vfr.alt_m</code>	#74 VFR_HUD	alt	float [m]	-
	<code>getVfrClimbRate</code>	<code>value[number]</code>	m/s	<code>luaMavsdkGetVfrClimbRate</code>	<code>mavlinkTelem.vfr.climbrate_mps</code>	#74 VFR_HUD	climb	float [m/s]	-
	<code>getVfrHeadingDeg</code>	<code>value[number]</code>	°	<code>luaMavsdkGetVfrHeadingDeg</code>	<code>mavlinkTelem.vfr.heading_deg</code>	#74 VFR_HUD	heading	uint16_t [°]	0-360, 0=north
Vfr	<code>getVfrThrottle</code>	<code>value[integer]</code>	%	<code>luaMavsdkGetVfrThrottle</code>	<code>mavlinkTelem.vfr.thro_pct</code>	#74 VFR_HUD	throttle	uint16_t [%]	0 to 100
	<code>getGpsCount</code>	<code>value[integer]</code>	bitmap	<code>luaMavsdkGetGpsCount</code>	<code>mavlinkTelem.gps_instancemask</code>	#24 GPS_RAW_INT #124 GPS2_RAW	any	-	-
GPS generic	<code>getPositionLatLonInt</code>	table (lat[integer], lon[integer])	"E7"	<code>luaMavsdkGetPositionLatLonInt</code>	<code>mavlinkTelem.gposition.lat</code> <code>mavlinkTelem.gposition.lon</code>	#33 GLOBAL_POSITION_INT #33 GLOBAL_POSITION_INT	lat lon	int32_t ["E7"] int32_t ["E7"]	need to divide with 10 million to get *
	<code>getPositionAltitudeMsl</code>	<code>value[number]</code>	m	<code>luaMavsdkGetPositionAltitudeMsl</code>	<code>mavlinkTelem.gposition.alt_mm/1000</code>	#33 GLOBAL_POSITION_INT	alt	int32_t [mm]	-
	<code>getPositionAltitudeRelative</code>	<code>value[number]</code>	m	<code>luaMavsdkGetPositionAltitudeRelative</code>	<code>mavlinkTelem.gposition.relative_alt_mm/1000</code>	#33 GLOBAL_POSITION_INT	relative_alt	int32_t [mm]	Altitude above ground
	<code>getPositionHeadingDeg</code>	<code>value[number]</code>	°	<code>luaMavsdkGetPositionHeadingDeg</code>	<code>mavlinkTelem.gposition.hdg_cdeg/100</code>	#33 GLOBAL_POSITION_INT	hdg	uint16_t [c°]	0 to 359.99°, UINT16_MAX = unknown
	<code>getPositionSpeedNed</code>	table (vx[number], vy[number], vz[number])	m/s m/s m/s	<code>luaMavsdkGetPositionSpeedNed</code>	<code>mavlinkTelem.gposition.vx_cm/100</code> <code>mavlinkTelem.gposition.vy_cm/100</code> <code>mavlinkTelem.gposition.vz_cm/100</code>	#33 GLOBAL_POSITION_INT #33 GLOBAL_POSITION_INT #33 GLOBAL_POSITION_INT	vx vy vz	int16_t [cm/s] int16_t [cm/s] int16_t [cm/s]	-
	<code>isGpsAvailable</code>	<code>value[bool]</code>	-	<code>luaMavsdkIsGps1Available</code>	<code>mavlinkTelem.gps_instancemask & 0x01</code>	#24 GPS_RAW_INT	any	-	-
GPS, 1st or only	<code>getGpsStatus</code>	table (fix[number], hdop[number], vdop[number], sat[number])	enum GPS_FIX_TYPE	<code>luaMavsdkGetGps1Status</code>	<code>mavlinkTelem.gps1.fix</code> <code>mavlinkTelem.gps1.hdop/100</code> <code>mavlinkTelem.gps1.vdop/100</code> <code>mavlinkTelem.gps1.sat</code>	#24 GPS_RAW_INT #24 GPS_RAW_INT #24 GPS_RAW_INT #24 GPS_RAW_INT	fix_type eph epv satellites_visible	uint8_t [enum] uint16_t uint16_t uint8_t	valid range 0 to 8 UINT16_MAX = unknown UINT16_MAX = unknown UINT8_MAX = unknown
	<code>getGpsFix</code>	<code>value[number]</code>	enum GPS_FIX_TYPE	<code>luaMavsdkGetGps1Fix</code>	<code>mavlinkTelem.gps1.fix</code>	#24 GPS_RAW_INT	fix_type	uint8_t [enum]	valid range 0 to 8
	<code>getGpsHDop</code>	<code>value[number]</code>	-	<code>luaMavsdkGetGps1HDop</code>	<code>mavlinkTelem.gps1.hdop/100</code>	#24 GPS_RAW_INT	eph	uint16_t	UINT16_MAX = unknown
	<code>getGpsVDop</code>	<code>value[number]</code>	-	<code>luaMavsdkGetGps1VDop</code>	<code>mavlinkTelem.gps1.vdop/100</code>	#24 GPS_RAW_INT	epv	uint16_t	UINT16_MAX = unknown
	<code>getGpsSat</code>	<code>value[number]</code>	-	<code>luaMavsdkGetGps1Sat</code>	<code>mavlinkTelem.gps1.sat</code>	#24 GPS_RAW_INT	satellites_visible	uint8_t	UINT8_MAX = unknown, currently no special handling
	<code>getGpsLatLonInt</code>	table (lat[integer], lon[integer])	"E7"	<code>luaMavsdkGetGps1LatLonInt</code>	<code>mavlinkTelem.gps1.lat</code> <code>mavlinkTelem.gps1.lon</code>	#24 GPS_RAW_INT #24 GPS_RAW_INT	lat lon	int32_t ["E7"] int32_t ["E7"]	need to divide with 10 million to get *
	<code>getGpsAltitudeMsl</code>	<code>value[number]</code>	m	<code>luaMavsdkGetGps1AltitudeMsl</code>	<code>mavlinkTelem.gps1.alt_mm/1000</code>	#24 GPS_RAW_INT	alt	int32_t [mm]	-
	<code>getGpsSpeed</code>	<code>value[number]</code>	m/s	<code>luaMavsdkGetGps1Speed</code>	<code>mavlinkTelem.gps1.vel_cm/100</code>	#24 GPS_RAW_INT	vel	uint16_t [cm/s]	>=UINT16_MAX outputs nil
	<code>getGpsCourseOverGroundDeg</code>	<code>value[number]</code>	°	<code>luaMavsdkGetGps1CourseOverGroundDeg</code>	<code>mavlinkTelem.gps1.cog_cdeg/100</code>	#24 GPS_RAW_INT	cog	uint16_t [0.01°]	0 to 359.99°, >=UINT16_MAX outputs nil
	<code>isGps2Available</code>	<code>value[bool]</code>	-	<code>luaMavsdkIsGps2Available</code>	<code>mavlinkTelem.gps_instancemask & 0x02</code>	#124 GPS2_RAW	any	-	-
GPS, 2nd	<code>getGps2Status</code>	table (fix[number], hdop[number], vdop[number], sat[number])	enum GPS_FIX_TYPE	<code>luaMavsdkGetGps2Status</code>	<code>mavlinkTelem.gps2.fix</code> <code>mavlinkTelem.gps2.hdop/100</code> <code>mavlinkTelem.gps2.vdop/100</code> <code>mavlinkTelem.gps2.sat</code>	#124 GPS2_RAW #124 GPS2_RAW #124 GPS2_RAW #124 GPS2_RAW	fix_type eph epv satellites_visible	uint8_t [enum] uint16_t uint16_t uint8_t	valid range 0 to 8 UINT16_MAX = unknown UINT16_MAX = unknown UINT8_MAX = unknown
	<code>getGps2Fix</code>	<code>value[number]</code>	enum GPS_FIX_TYPE	<code>luaMavsdkGetGps2Fix</code>	<code>mavlinkTelem.gps2.fix</code>	#124 GPS2_RAW	fix_type	uint8_t [enum]	valid range 0 to 8
	<code>getGps2HDop</code>	<code>value[number]</code>	-	<code>luaMavsdkGetGps2HDop</code>	<code>mavlinkTelem.gps2.hdop/100</code>	#124 GPS2_RAW	eph	uint16_t	UINT16_MAX = unknown
	<code>getGps2VDop</code>	<code>value[number]</code>	-	<code>luaMavsdkGetGps2VDop</code>	<code>mavlinkTelem.gps2.vdop/100</code>	#124 GPS2_RAW	epv	uint16_t	UINT16_MAX = unknown
	<code>getGps2Sat</code>	<code>value[number]</code>	-	<code>luaMavsdkGetGps2Sat</code>	<code>mavlinkTelem.gps2.sat</code>	#124 GPS2_RAW	satellites_visible	uint8_t	UINT8_MAX = unknown, currently no special handling
	<code>getGps2LatLonInt</code>	table (lat[integer], lon[integer])	"E7"	<code>luaMavsdkGetGps2LatLonInt</code>	<code>mavlinkTelem.gps2.lat</code> <code>mavlinkTelem.gps2.lon</code>	#124 GPS2_RAW #124 GPS2_RAW	lat lon	int32_t ["E7"] int32_t ["E7"]	need to divide with 10 million to get *
	<code>getGps2AltitudeMsl</code>	<code>value[number]</code>	m	<code>luaMavsdkGetGps2AltitudeMsl</code>	<code>mavlinkTelem.gps2.alt_mm/1000</code>	#124 GPS2_RAW	alt	int32_t [mm]	-
	<code>getGps2Speed</code>	<code>value[number]</code>	m/s	<code>luaMavsdkGetGps2Speed</code>	<code>mavlinkTelem.gps2.vel_cm/100</code>	#124 GPS2_RAW	vel	uint16_t [cm/s]	>=UINT16_MAX outputs nil
	<code>getGps2CourseOverGroundDeg</code>	<code>value[number]</code>	°	<code>luaMavsdkGetGps2CourseOverGroundDeg</code>	<code>mavlinkTelem.gps2.cog_cdeg/100</code>	#124 GPS2_RAW	cog	uint16_t [0.01°]	>=UINT16_MAX outputs nil
	<code>isBatAvailable</code>	<code>value[bool]</code>	-	<code>luaMavsdkIsBat1Available</code>	<code>mavlinkTelem.bat_instancemask & 0x01</code>	#147 BATTERY_STATUS	id	uint8_t	id must be < 8
Battery	<code>isBat2Available</code>	<code>value[bool]</code>	-	<code>luaMavsdkIsBat2Available</code>	<code>mavlinkTelem.bat_instancemask & 0x02</code>	#147 BATTERY_STATUS	id	uint8_t	id must be < 8
	<code>getBatCount</code>	<code>value[integer]</code>	-	<code>luaMavsdkGetBatCount</code>	<code>mavlinkTelem.bat_instancemask</code>	#147 BATTERY_STATUS	id	uint8_t	id must be < 8
Battery, 1st or only	<code>getBatChargeConsumed</code>	<code>value[number]</code>	mAh	<code>luaMavsdkGetBat1ChargeConsumed</code>	<code>mavlinkTelem.bat1.charge_consumed_mAh</code>	#147 BATTERY_STATUS	current_consumed	int32_t [mAh]	negative outputs nil
	<code>getBatEnergyConsumed</code>	<code>value[number]</code>	J	<code>luaMavsdkGetBat1EnergyConsumed</code>	<code>mavlinkTelem.bat1.energy_consumed_hj * 100</code>	#147 BATTERY_STATUS	energy_consumed	int32_t [100J]	negative outputs nil
	<code>getBatTemperature</code>	<code>value[number]</code>	°C	<code>luaMavsdkGetBat1Temperature</code>	<code>mavlinkTelem.bat1.temperature_cc/100</code>	#147 BATTERY_STATUS	temperature	int16_t [0.01°C]	>=INT16_MAX outputs nil
	<code>getBatVoltage</code>	<code>value[number]</code>	V	<code>luaMavsdkGetBat1Voltage</code>	<code>mavlinkTelem.bat1.voltage_mv/1000</code>	#147 BATTERY_STATUS	voltage[10]	uint16_t [10] [mV]	-
	<code>getBatCurrent</code>	<code>value[number nil]</code>	A	<code>luaMavsdkGetBat1Current</code>	<code>mavlinkTelem.bat1.current_ca/100</code>	#147 BATTERY_STATUS	voltages_ext[4]	uint16_t [4] [mV]	-1 outputs nil
	<code>getBatRemaining</code>	<code>value[integer]</code>	%	<code>luaMavsdkGetBat1Remaining</code>	<code>mavlinkTelem.bat1.remaining_pct</code>	#147 BATTERY_STATUS	current_battery	int16_t [10mA]	-1 outputs nil
	<code>getBatCellCount</code>	<code>value[integer]</code>	-	<code>luaMavsdkGetBat1CellCount</code>	<code>mavlinkTelem.bat1.cellcount</code>	#147 BATTERY_STATUS	battery_remaining	int8_t [%]	-1 outputs nil
	<code>getBatTimeRemaining</code>	<code>value[integer nil]</code>	s	<code>luaMavsdkGetBat1TimeRemaining</code>	<code>mavlinkTelem.bat1.time_remaining</code>	#147 BATTERY_STATUS	voltage[10]	uint16_t [10] [mV]	negative outputs nil
	<code>getBatChargeState</code>	<code>value[integer nil]</code>	enum MAV_BATTERY_CHARGE_STATE	<code>luaMavsdkGetBat1ChargeState</code>	<code>mavlinkTelem.bat1.charge_state</code>	#147 BATTERY_STATUS	voltages_ext[4]	uint16_t [4] [mV]	if time_remaining == 0 outputs nil
	<code>getBatFaultBitMask</code>	<code>value[integer nil]</code>	enum MAV_BATTERY_FAULT	<code>luaMavsdkGetBat1FaultBitMask</code>	<code>mavlinkTelem.bat1.fault_bitmask</code>	#147 BATTERY_STATUS	time_remaining	int32_t [s]	if undefined, outputs nil
<code>getBatCapacity</code>	<code>value[number]</code>	-	<code>luaMavsdkGetBat1Capacity</code>	<code>mavlinkTelem.param.BATT_CAPACITY</code>	#22 PARAM_VALUE	charge_state	uint8_t [enum]	if state is != (failed or unhealthy) outputs nil	
						fault_bitmask	int32_t [enum]	negative outputs nil	
						param_value	float	unit mAh in 50 mAh steps in ArduPilot	

	MavSDK function	return value / parameter	Unit	MavSDK internal C++ function/wrapper	Value stems internally from or calls function(s)	MAVLink message	MAVLink msg field(s)	Data type & unit	Comments
Battery_2nd	getBat2ChargeConsumed	value[number]	mAh	luaMavsdGetBat2ChargeConsumed	mavlinkTelem.bat2.charge_consumed_mAh	#147 BATTERY_STATUS	current_consumed	uint32_t [mAh]	negative outputs nil
	getBat2EnergyConsumed	value[number]	J	luaMavsdGetBat2EnergyConsumed	mavlinkTelem.bat2.energy_consumed_hj * 100	#147 BATTERY_STATUS	energy_consumed	uint32_t [100J]	negative outputs nil
	getBat2Temperature	value[number]	°C	luaMavsdGetBat2Temperature	mavlinkTelem.bat2.temperature	#147 BATTERY_STATUS	temperature	int16_t [0.01°C]	>=INT16_MAX outputs nil
	getBat2Voltage	value[number]	V	luaMavsdGetBat2Voltage	mavlinkTelem.bat2.voltage_mV/1000	#147 BATTERY_STATUS	voltage[10]	uint16_t[10] [mV]	
	getBat2Current	value[number nil]	A	luaMavsdGetBat2Current	mavlinkTelem.bat2.current_ca/100	#147 BATTERY_STATUS	voltage_ext[4]	uint16_t[4] [mV]	
	getBat2Remaining	value[integer]	%	luaMavsdGetBat2Remaining	mavlinkTelem.bat2.remaining_pct	#147 BATTERY_STATUS	current_battery	int16_t [10mA]	-1 outputs nil
	getBat2CellCount	value[integer]	-	luaMavsdGetBat2CellCount	mavlinkTelem.bat2.cellcount	#147 BATTERY_STATUS	battery_remaining	int8_t [%]	-1 outputs nil
	getBat2TimeRemaining	value[integer nil]	s	luaMavsdGetBat2TimeRemaining	mavlinkTelem.bat2.time_remaining	#147 BATTERY_STATUS	voltage[10]	uint16_t[10] [mV]	negative outputs nil
	getBat2ChargeState	value[integer nil]	enum MAV_BATTERY_CHARGE_STATE	luaMavsdGetBat2ChargeState	mavlinkTelem.bat2.charge_state	#147 BATTERY_STATUS	voltage_ext[4]	uint16_t[4] [10mV]	negative outputs nil
	getBat2FaultBitMask	value[integer nil]	enum MAV_BATTERY_FAULT	luaMavsdGetBat2FaultBitMask	mavlinkTelem.bat2.fault_bitmask	#147 BATTERY_STATUS	time_remaining	int32_t [s]	if time_remaining == 0 outputs nil
getBat2Capacity	value[number]	-	luaMavsdGetBat2Capacity	mavlinkTelem.param.BATT2_CAPACITY	#22 PARAM_VALUE	charge_state	uint8_t [enum]	if state is (failed or unhealthy) outputs nil	
							fault_bitmask	uint32_t [enum]	negative outputs nil, unit mAh in 50 mAh steps in ArduPilot
Mission	getMission	table (count[integer], current_seq[integer])	-	luaMavsdGetMission	mavlinkTelem.mission.count mavlinkTelem.mission.seq_current	#44 MISSION_COUNT #42 MISSION_CURRENT	count seq	uint16_t uint16_t	
	getMissionItem	table (seq[integer], command[integer], frame[integer], is_global[boolean], lat[integer] or x[number], lon[integer] or y[number], alt[number] or z[number])	enum MAV_CMD_ *(value) enum MAV_FRAME . °e7 or m °e7 or m °e7 or m	luaMavsdGetMissionItem	mavlinkTelem.missionitem.seq mavlinkTelem.missionitem.command mavlinkTelem.missionitem.frame mavlinkTelem.missionitem.frame mavlinkTelem.missionitem.x or ./x/10000 mavlinkTelem.missionitem.y or ./y/10000 mavlinkTelem.missionitem.z or ./z/10000	#73 MISSION_ITEM_INT #73 MISSION_ITEM_INT #73 MISSION_ITEM_INT #73 MISSION_ITEM_INT #73 MISSION_ITEM_INT #73 MISSION_ITEM_INT #73 MISSION_ITEM_INT	seq command frame frame x y z	uint16_t uint16_t [enum] uint8_t [enum] uint8_t [enum] int32_t [°e7] or [m°e4] int32_t [°e7] or [m°e4] float [m]	starts at 0, no gaps coordinate system coordinate system global °e7, local m°e4 global alt m, local z m
	getNavController	table (nav_bearing[number], target_bearing[number], wp_dist[number])	m	luaMavsdGetNavControllerOutput	mavlinkTelem.navControllerOutput.nav_bearing mavlinkTelem.navControllerOutput.target_bearing mavlinkTelem.navControllerOutput.wp_dist	#62 NAV_CONTROLLER_OUTPUT #62 NAV_CONTROLLER_OUTPUT #62 NAV_CONTROLLER_OUTPUT	nav_bearing target_bearing wp_dist	int16_t [°] int16_t [°] uint16_t [m]	
	isStatusTextAvailable	value[bool]	-	luaMavsdGetStatusTextAvailable	not mavlinkTelem.statusText.fifo.isEmpty()	#253 STATUSTEXT	severity text	uint8_t [enum] char[50]	valid range 0 to 7 without null termination character
getStatusText	value[integer nil] value[string nil]	enum MAV_SEVERITY -	luaMavsdGetStatusText	mavlinkTelem.statusText.fifo	#253 STATUSTEXT	severity text	uint8_t [enum] char[50]	if nothing in buffer, outputs nil, nil	
RF Link	getRadioRssi	value[integer]	-	luaMavsdGetRadioRssi	mavlinkTelem.radio.rssi, or mavlinkTelem.radio.rssi65, or mavlinkTelem.radio.rssi35	#109 RADIO_STATUS #65 RC_CHANNELS #35 RC_CHANNELS_RAW	rssi rssi rssi	uint8_t uint8_t uint8_t	valid range 0-254, 255 = invalid valid range 0-254, 255 = invalid valid range 0-254, 255 = invalid
	getRadioRemoteRssi	value[integer]	-	luaMavsdGetRadioRemoteRssi	mavlinkTelem.radio.remrssi	#109 RADIO_STATUS	remrssi	uint8_t	valid range 0-254, 255 = invalid
	getRadioNoise	value[integer]	2dB on SiK	luaMavsdGetRadioNoise	mavlinkTelem.radio.noise	#109 RADIO_STATUS	noise	uint8_t	valid range 0-254, 255 = invalid
	getRadioRemoteNoise	value[integer]	2dB on SiK	luaMavsdGetRadioRemoteNoise	mavlinkTelem.radio.remnoise	#109 RADIO_STATUS	remnoise	uint8_t	valid range 0-254, 255 = invalid
	getRadioRssiScaled	value[integer nil]	-	luaMavsdGetRadioRssiScaled	mavlinkTelem.radio.rssi_scaled, calculated from rssi and g_model.mavlinkRssiScale	#109 RADIO_STATUS or #65 RC_CHANNELS or #35 RC_CHANNELS_RAW	rssi rssi rssi	uint8_t uint8_t uint8_t	if #109 or #65 or #35 are not receiving, outputs nil
	optionGetRssiScale	value[integer]	-	luaMavsdOptionGetRssiScale	g_model.mavlinkRssiScale	-	-	-	OpenTX internal function
	optionSetRssiScale	value[integer]	-	luaMavsdOptionSetRssiScale	g_model.mavlinkRssiScale = value, limited from 0 to 255	-	-	-	OpenTX internal function
	optionIsRssiEnabled	value[bool]	-	luaMavsdOptionIsRssiEnabled	g_model.mavlinkRssi	-	-	-	OpenTX internal function
	optionEnableRssi	value[integer][bool]	-	luaMavsdOptionEnableRssi	g_model.mavlinkRssi = value ? 1 : 0	-	-	-	OpenTX internal function
	radioDisableRssiVoice	value[integer][bool]	-	luaMavsdRadioDisableRssiVoice	if value=0 mavlinkTelem.radio.rssi_voice_disabled = true else false	-	-	-	OpenTX internal function
AP	apIsFlying	value[bool]	-	luaMavsdApIsFlying	not mavlinkTelem.autopilot.is_standby	#0 HEARTBEAT	system_status	uint8_t [enum]	
	apIsFailsafe	value[bool]	-	luaMavsdApIsFailsafe	mavlinkTelem.autopilot.is_critical	#0 HEARTBEAT	system_status	uint8_t [enum]	
	apPositionOk	value[bool]	-	luaMavsdApPositionOk	mavlinkTelem.apPositionOk()	#193 EKF_STATUS_REPORT	flags	uint16_t [enum]	true if EKF_POS_HORIZ_ABS & EKF_VELOCITY_HORIZ
	apGetArmingCheck	value[number nil]	bitmap	luaMavsdApGetArmingCheck	mavlinkTelem.param.ARMING_CHECK	#22 PARAM_VALUE	param_value	float	returns nil if mavlinkTelem.param.ARMING_CHECK < 0
	apSetFlightMode	value[integer]	enum PLANE_MODE or COPTER_MODE or SUB_MODE or ROVER_MODE or TRACKER_MODE	luaMavsdApSetFlightMode	mavlinkTelem.apSetFlightMode(value)	176 MAV_CMD_DO_SET_MODE	2: Custom Mode	[enum]	value = ap_flight_mode, according vehicle type
	apRequestBanner	none	-	luaMavsdApRequestBanner	mavlinkTelem.apRequestBanner()	42428 MAV_CMD_DO_SEND_BANNER	-	-	
	apArm	value[integer][bool]	-	luaMavsdApArm	mavlinkTelem.apArm()	400 MAV_CMD_COMPONENT_ARM_DISARM	1: Arm	-	if value > 0, arms
	apCopterTakeOff	value[number][alt]	m	luaMavsdApCopterTakeOff	mavlinkTelem.apCopterTakeOff(value)	22 MAV_CMD_NAV_TAKEOFF	7: Altitude	[m]	value = Altitude
apLand	none	-	luaMavsdApLand	mavlinkTelem.apLand()	21 MAV_CMD_NAV_LAND	-	-		
apGetRangeFinder	value[number]	m	luaMavsdApGetRangeFinder	mavlinkTelem.rangefinder.distance	#173 RANGEFINDER	distance	float [m]		
Camera	camerasReceiving	value[bool]	-	luaMavsdCamerasReceiving	if (mavlinkTelem.camera.is_receiving > 0) true else false	any from camera.compId	-	-	
	camerasInitialized	value[bool]	-	luaMavsdCamerasInitialized	if (((mavlinkTelem.camera.is_receiving > 0) and mavlinkTelem.camera.is_initialized) true else false	any when _msg.compId == camera.compId and no requests waiting	-	-	
	cameraGetInfo	table (compId[integer], flags[integer], has_video[bool], has_photo[bool], has_modes[bool], total_capacity[number nil], vendor_name[string], model_name[string], firmware_version[string])	enum MAV_COMPONENT enum CAMERA_CAP_FLAGS - - - MiB - - -	luaMavsdCameraGetInfo	mavlinkTelem.camera.compId mavlinkTelem.cameraInfo.flags mavlinkTelem.cameraInfo.has_video mavlinkTelem.cameraInfo.has_photo mavlinkTelem.cameraInfo.has_modes mavlinkTelem.cameraInfo.total_capacity_MiB mavlinkTelem.cameraInfo.vendor_name mavlinkTelem.cameraInfo.model_name mavlinkTelem.cameraInfo.firmware_version	#0 HEARBEAT #259 CAMERA_INFORMATION #259 CAMERA_INFORMATION #259 CAMERA_INFORMATION #259 CAMERA_INFORMATION #261 STORAGE_INFORMATION #259 CAMERA_INFORMATION #259 CAMERA_INFORMATION #259 CAMERA_INFORMATION	_msg.compId (header, not payload!) flags flags & 1 flags & 2 flags & 4 total_capacity (only when READY, else NAN) vendor_name model_name firmware_version	uint8_t [enum] uint32_t [enum] uint32_t [enum] uint32_t [enum] uint32_t [enum] float [MiB] uint8_t [32] uint8_t [32] uint32_t	Dev, Patch, Minor, Major
	cameraGetStatus	table (system_status[integer], mode[integer], video_on[boolean], photo_on[boolean], available_capacity[number nil], battery_voltage[number nil], battery_remainingpct[integer nil])	enum MAV_STATE enum CAMERA_MODE - - MiB V %	luaMavsdCameraGetStatus	mavlinkTelem.camera.system_status mavlinkTelem.cameraStatus.mode mavlinkTelem.cameraStatus.video_on mavlinkTelem.cameraStatus.photo_on mavlinkTelem.cameraStatus.available_capacity_MiB mavlinkTelem.cameraStatus.battery_voltage_V mavlinkTelem.cameraStatus.battery_remaining_pct	#0 HEARBEAT #260 CAMERA_SETTINGS #262 CAMERA_CAPTURE_STATUS #262 CAMERA_CAPTURE_STATUS #262 CAMERA_CAPTURE_STATUS or #261 STORAGE_INFORMATION #147 BATTERY_STATUS #147 BATTERY_STATUS	system_status mode_id video_status, if > 0 outputs true, else false image_status, if > 0 outputs true, else false available_capacity (only when READY, else NAN) sum voltages/1000, if all uint16_MAX then NAN battery_remaining	uint8_t [enum] uint8_t [enum] uint8_t uint8_t float [MiB] float [MiB] uint16_t[10] [mV] int8_t [%]	converted to boolean, true if IMAGE converted to boolean converted to boolean range 0 to 100, -1 if unknown
	cameraSendVideoMode	none	-	luaMavsdCameraSendVideoMode	mavlinkTelem.sendCameraSetVideoMode()	530 MAV_CMD_SET_CAMERA_MODE	1: 0 2: Camera Mode = CAMERA_MODE_VIDEO = 1 3: 0 4: 0 7: 0	-	
	cameraSendPhotoMode	none	-	luaMavsdCameraSendPhotoMode	mavlinkTelem.sendCameraSetPhotoMode()	530 MAV_CMD_SET_CAMERA_MODE	1: 0 2: Camera Mode = CAMERA_MODE_IMAGE = 0 3: 0 4: 0 7: 0	-	
	cameraStartVideo	none	-	luaMavsdCameraStartVideo	mavlinkTelem.sendCameraStartVideo()	2500 MAV_CMD_VIDEO_START_CAPTURE	1: Stream ID = 0 2: Status Frequency = 0.2 = 5 s period 3 to 7: 0	[Hz]	
	cameraStopVideo	none	-	luaMavsdCameraStopVideo	mavlinkTelem.sendCameraStopVideo()	2501 MAV_CMD_VIDEO_STOP_CAPTURE	1: Reserved = 0 2: Interval = 0 3: Total Images = 1 4: Sequence Number = 0	- [s] - -	
	cameraTakePhoto	none	-	luaMavsdCameraTakePhoto	mavlinkTelem.sendCameraTakePhoto()	2000 MAV_CMD_IMAGE_START_CAPTURE	5 to 7: 0	-	

	MavSDK function	return value / parameter	Unit	MavSDK internal C++ function/wrapper	Value stems internally from or calls function(s)	MAVLink message	MAVLink msg field(s)	Data type & unit	Comments
Gimbal generic	gimbalsReceiving	value[bool]	-	luaMavsdkgimbalsReceiving	if (mavlinkTelem.gimbal.is_receiving > 0) true else false	any from gimbal.compId	-	-	-
	gimbalsInitialized	value[bool]	-	luaMavsdkgimbalsInitialized	if ((mavlinkTelem.gimbal.is_receiving > 0) and mavlinkTelem.gimbal.is_initialized) true else false	#0 HEARTBEAT	any	-	at least one HEARTBEAT from gimbal
	gimbalGetInfo	table (compId[integer], vendor_name[string], model_name[string], custom_name[string], firmware_version[string], hardware_version[string], capability_flags[integer])	enum MAV_COMPONENT	luaMavsdkgimbalGetInfo	mavlinkTelem.gimbaldeviceInfo.vendor_name mavlinkTelem.gimbaldeviceInfo.model_name mavlinkTelem.gimbaldeviceInfo.custom_name mavlinkTelem.gimbaldeviceInfo.firmware_version mavlinkTelem.gimbaldeviceInfo.hardware_version mavlinkTelem.gimbaldeviceInfo.cap_flags	#283 GIMBAL_DEVICE_INFORMATION #283 GIMBAL_DEVICE_INFORMATION #283 GIMBAL_DEVICE_INFORMATION #283 GIMBAL_DEVICE_INFORMATION #283 GIMBAL_DEVICE_INFORMATION	msg.compId (header, not payload!) vendor_name model_name custom_name firmware_version hardware_version cap_flags + custom_capflags	uint8_t [enum] char[32] char[32] char[32] uint32_t uint32_t uint16_t + uint16_t	Dev, Patch, Minor, Major bitmap + bitmap
	gimbalGetStatus	table (system_status[number], custom_mode[number], is_armed[bool], prearm_ok[bool])	-	luaMavsdkgimbalGetStatus	mavlinkTelem.gimbal.system_status mavlinkTelem.gimbal.custom_mode mavlinkTelem.gimbal.is_armed mavlinkTelem.gimbal.pream_ok	#0 HEARTBEAT #0 HEARTBEAT #0 HEARTBEAT #0 HEARTBEAT	system_status custom_mode base_mode custom_mode	uint8_t uint32_t uint8_t uint8_t -> bool	-
	gimbalGetAttRollDeg	value[number]	*	luaMavsdkgimbalGetAttRollDeg	mavlinkTelem.gimbalAtt.roll_deg	#30 ATTITUDE	roll * 180/PI	float [rad]	-
	gimbalGetAttPitchDeg	value[number]	*	luaMavsdkgimbalGetAttPitchDeg	mavlinkTelem.gimbalAtt.pitch_deg	#30 ATTITUDE	pitch * 180/PI	float [rad]	-
	gimbalGetAttYawDeg	value[number]	*	luaMavsdkgimbalGetAttYawDeg	mavlinkTelem.gimbalAtt.yaw_deg_relative	#30 ATTITUDE	yaw * 180/PI	float [rad]	-
Gimbal protocol v1	gimbalSendNeutralMode	none	-	luaMavsdkgimbalSendNeutralMode	mavlinkTelem.sendGimbalTargetingMode(1)	204 MAV_CMD_DO_MOUNT_CONFIGURE	1: mode = 1	-	-
	gimbalSendMavlinkTargetingMode	none	-	luaMavsdkgimbalSendMavlinkTargetingMode	mavlinkTelem.sendGimbalTargetingMode(2)	204 MAV_CMD_DO_MOUNT_CONFIGURE	1: mode = 2	-	-
	gimbalSendRcTargetingMode	none	-	luaMavsdkgimbalSendRcTargetingMode	mavlinkTelem.sendGimbalTargetingMode(3)	204 MAV_CMD_DO_MOUNT_CONFIGURE	1: mode = 3	-	-
	gimbalSendGpsPointMode	none	-	luaMavsdkgimbalSendGpsPointMode	mavlinkTelem.sendGimbalTargetingMode(4)	204 MAV_CMD_DO_MOUNT_CONFIGURE	1: mode = 4	-	-
	gimbalSendSysIdTargetingMode	none	-	luaMavsdkgimbalSendSysIdTargetingMode	mavlinkTelem.sendGimbalTargetingMode(5)	204 MAV_CMD_DO_MOUNT_CONFIGURE	1: mode = 5	-	-
	gimbalSendPitchYawDeg	value1[number][pitch], value2[number][yaw]	*	luaMavsdkgimbalSendPitchYawDeg	mavlinkTelem.sendGimbalPitchYawDeg (value1, value2)	205 MAV_CMD_DO_MOUNT_CONTROL	1: Pitch = value1 2: Roll = 0 3: Yaw = value2 4: Altitude = 0 5: Latitude = 0 6: Longitude = 0 7: Mode = gimbalmanagerOut.mount_mode	[°] or [°/s] [°] or [°/s] [°] or [°/s] [m] [enum]	-
	gimbalsProtocolV2	value[bool]	-	luaMavsdkgimbalProtocolV2	mavlinkTelem.isStorm32GimbalProtocolV2()	-	-	-	returns_storm32_gimbal_protocol_v2
Storm32 gimbal protocol v2	gimbalSetProtocolV2	value[number]	-	luaMavsdkgimbalSetProtocolV2	mavlinkTelem.setStorm32GimbalProtocolV2(value)	-	-	-	sets_storm32_gimbal_protocol_v2=value
	gimbalClientsReceiving	value[bool]	-	luaMavsdkgimbalClientsReceiving	if (mavlinkTelem.gimbalmanager.is_receiving > 0) true else false	#62011 STORM32_GIMBAL_MANAGER_STATUS	any	-	3.3 sec timeout
	gimbalClientsInitialized	value[bool]	-	luaMavsdkgimbalClientsInitialized	if ((mavlinkTelem.gimbalmanager.is_receiving > 0) and mavlinkTelem.gimbalmanager.is_initialized) true else false	#62011 STORM32_GIMBAL_MANAGER_STATUS	any and no requests waiting	-	-
	gimbalClientGetInfo	table (gimbal_manager_id[integer], gimbal_id[integer], device_capability_flags[integer], manager_capability_flags[integer])	enum MAV_COMPONENT enum MAV_STORM32_ GIMBAL_DEVICE_CAP_FLAGS enum MAV_STORM32_ GIMBAL_MANAGER_CAP_FLAGS	luaMavsdkgimbalClientGetInfo	mavlinkTelem.gimbal.compId mavlinkTelem.gimbalmanagerInfo. device_cap_flags mavlinkTelem.gimbalmanagerInfo. manager_cap_flags	#62010 STORM32_GIMBAL_MANAGER_ _INFORMATION #62010 STORM32_GIMBAL_MANAGER_ _INFORMATION	msg.compId (header, not payload!) msg.compId (header, not payload!) device_cap_flags manager_cap_flags	uint8_t [enum] uint8_t [enum] uint32_t [enum] uint32_t [enum]	-
	gimbalClientGetStatus	table (supervisor[integer], device_flags[integer], manager_flags[integer], profile[integer])	enum MAV_STORM32_ GIMBAL_MANAGER_CLIENT enum MAV_STORM32_ GIMBAL_DEVICE_FLAGS enum MAV_STORM32_ GIMBAL_MANAGER_FLAGS enum MAV_STORM32_ GIMBAL_MANAGER_PROFILE	luaMavsdkgimbalClientGetStatus	mavlinkTelem.gimbalmanagerStatus.supervisor mavlinkTelem.gimbalmanagerStatus.device_flags mavlinkTelem.gimbalmanagerStatus.manager_flags mavlinkTelem.gimbalmanagerStatus.profile	#62011 STORM32_GIMBAL_MANAGER_STATUS (all 4)	supervisor device_flags manager_flags profile	uint8_t [enum] uint16_t [enum] uint16_t [enum] uint8_t [enum]	0 = none 0 = default
	gimbalClientSetRetract	value[integer][flags]	-	luaMavsdkgimbalClientSetRetract	mavlinkTelem.setStorm32GimbalClientRetract(value)	-	-	-	sets_gimbalmanagerOut.device_flags
	gimbalClientSetNeutral	value[integer][flags]	-	luaMavsdkgimbalClientSetNeutral	mavlinkTelem.setStorm32GimbalClientNeutral(value)	-	-	-	sets_gimbalmanagerOut.device_flags
	gimbalClientSetLock	value1[integer][roll_lock], value2[integer][pitch_lock], value3[integer][yaw_lock]	-	luaMavsdkgimbalClientSetLock	mavlinkTelem.setStorm32GimbalClientLock (value1, value2, value3)	-	-	-	gimbalmanagerOut.device_flags
	gimbalClientSetFlags	value[integer][flags]	-	luaMavsdkgimbalClientSetFlags	mavlinkTelem.setStorm32GimbalClientFlags(value)	-	-	-	sets_gimbalmanagerOut.manager_flags
	gimbalClientSendPitchYawDeg	value1[number][pitch], value2[number][yaw]	*	luaMavsdkgimbalClientSendPitchYawDeg	mavlinkTelem.sendStorm32GimbalManagerPitchYawDeg(value1, value2)	#62013 STORM32_GIMBAL_MANAGER_CONTROL_PITCHYAW	target_system = _sysid target_component = gimbalmanager.compId gimbal_id = gimbal.compId client = 3 device_flags = _t_storm32GM_gdflags manager_flags = _t_storm32GM_gmflags pitch = value1*PI/180 yaw = value2*PI/180 pitch_rate = NAN yaw_rate = NAN	uint8_t uint8_t uint8_t uint8_t [enum] uint16_t [enum] uint16_t [enum] float [rad] float [rad/s] float [rad/s]	-
	gimbalClientSendControlPitchYawDeg	value1[number][pitch], value2[number][yaw]	*	luaMavsdkgimbalClientSendControlPitchYawDeg	mavlinkTelem.sendStorm32GimbalManagerControlPitchYawDeg(value1, value2)	#62012 STORM32_GIMBAL_MANAGER_CONTROL	target_system = _sysid target_component = gimbalmanager.compId gimbal_id = gimbal.compId client = 3 device_flags = _t_storm32GM_control_gdflags manager_flags = _t_storm32GM_control_gmflags q = calculated from value1 and value2 angular_velocity_x = NAN angular_velocity_y = NAN angular_velocity_z = NAN	uint8_t uint8_t uint8_t uint8_t uint16_t uint16_t float[4] float float float	-
	gimbalClientSendCmdPitchYawDeg	value1[number][pitch], value2[number][yaw]	*	luaMavsdkgimbalClientSendCmdPitchYawDeg	mavlinkTelem.sendStorm32GimbalManagerCmdPitchYawDeg(value1, value2)	#62002 MAV_CMD_STORM32_DO_GIMBAL_MANAGER_CONTROL_PITCHYAW	1: Pitch angle = value1 2: Yaw angle = value2 3: Pitch rate = NaN 4: Yaw rate = NaN 5: Gimbal device flags = _t_storm32GM_cmd_gdflags 6: Gimbal manager flags = _t_storm32GM_cmd_gmflags 7: Gimbal and client ids = 3 * 256 + gimbal.compId	[°] [°] [°/s] [°/s]	-
	gimbalDeviceSendPitchYawDeg	value1[number][pitch], value2[number][yaw]	*	luaMavsdkgimbalDeviceSendPitchYawDeg	mavlinkTelem.sendStorm32GimbalDevicePitchYawDeg (value1, value2)	#62002 STORM32_GIMBAL_DEVICE_CONTROL	target_system = _sysid target_component = gimbal.compId flags = _t_storm32GD_flags q = calculated from value1 and value2 angular_velocity_x = NAN angular_velocity_y = NAN angular_velocity_z = NAN	uint8_t uint8_t uint16_t [enum] float[4] float [rad/s] float [rad/s] float [rad/s]	-

MavSDK function	return value / parameter	Unit	MavSDK internal C++ function/wrapper	Value stems internally from or calls function(s)	MAVLink message	MAVLink msg field(s)	Data type & unit	Comments
apSetGroundSpeed	value[number]{speed}	m/s	luaMavsdkApSetGroundSpeed	mavlinkTelem.apSetGroundSpeed(value)	178 MAV_CMD_DO_CHANGE_SPEED	1: Speed Type = 1 2: Speed = value 3: Throttle = -1 4: Relative = 1 (relative)	[m/s]	
apSimpleGotoPosIntAltRel	value1[integer]{lat}, value2[integer]{lon}, value3[number]{alt}	m*e4 m*e4 m	luaMavsdkApSimpleGotoPosIntAltRel	mavlinkTelem.apSimpleGotoPosAlt (value1, value2, value3)	#73 MISSION_ITEM_INT 16 MAV_CMD_NAV_WAYPOINT	target_system = _sysid target_componetrn = autopilot.compuid seq = 0 frame = MAV_FRAME_GLOBAL_RELATIVE_ALT command = MAV_CMD_NAV_WAYPOINT current = 2 (=ArduPlane speciality!) autocontinue = 0 param1 = 1: Hold = 0 param2 = 2: Accept Radius = 0 param3 = 3: Pass Radius = 0 param4 = 4: Yaw = 0 x = 5: Latitude = value1 y = 6: Longitude = value2 z = 7: Altitude = value3 mission_type = MAV_MISSION_TYPE_MISSION	uint8_t uint8_t uint16_t uint8_t [enum] uint16_t [enum] uint8_t uint8_t float [s] float [m] float [m] float [°] int32_t [m*e4] int32_t [m*e4] float [m] uint8_t enum	
apGotoPosIntAltRel	value1[integer]{lat}, value2[integer]{lon}, value3[number]{alt}	*E7 *E7 m	luaMavsdkApGotoPosIntAltRel	mavlinkTelem.apGotoPosAltYawDeg (value1, value2, value3, NAN)	#86 MAVLINK_MSG_ID_SET_POSITION_ TARGET_GLOBAL_INT	time_boot_ms = get_tmr10ms()*10 target_system = _sysid target_component = autopilot.compuid coordinate_frame = MAV_FRAME_GLOBAL_ RELATIVE_ALT_INT type_mask = if alt != NaN then 0x0DF8 else 0x0DFC lat_int = value1 lon_int = value2 alt = if value3 != NaN then value 3, else 1 vx = 0 vy = 0 vz = 0 afx = 0 afy = 0 afz = 0 yaw = 0 yaw_rate = 0	uint32_t [ms] uint8_t uint8_t uint8_t [enum] uint16_t [bitmap]	
apGotoPosIntAltRelYawDeg	value1[integer]{lat}, value2[integer]{lon}, value3[number]{alt}, value4[number]{yaw}	*E7 *E7 m °	luaMavsdkApGotoPosIntAltRelYawDeg	mavlinkTelem.apGotoPosAltYawDeg (value1, value2, value3, value4)	#86 MAVLINK_MSG_ID_SET_POSITION_ TARGET_GLOBAL_INT	time_boot_ms = get_tmr10ms()*10 target_system = _sysid target_component = autopilot.compuid coordinate_frame = MAV_FRAME_GLOBAL_ RELATIVE_ALT_INT type_mask = 0x09F8 (yaw and alt OK), 0x0DF8 (yaw=NaN, alt OK), 0x09FC (yaw OK, alt=NaN), 0x0DFC (alt and yaw=NaN) lat_int = value1 lon_int = value2 alt = if value3 != NaN then value 3, else 1 vx = 0 vy = 0 vz = 0 afx = 0 afy = 0 afz = 0 yaw = if value4 != NaN then value4*Pi/180 else 0 yaw_rate = 0	uint32_t [ms] uint8_t uint8_t uint8_t enum uint16_t bitmap int32_t [°E7] int32_t [°E7] float [m] float [m/s] float [m/s] float [m/s] float [m/s] float [m/s²] float [m/s²] float [m/s²] float [m/s²] float [rad]	
apGotoPosIntAltRelVel	value1[integer]{lat}, value2[integer]{lon}, value3[number]{alt}, value4[number]{vx}, value5[number]{vy}, value6[number]{vz}	*E7 *E7 m m/s m/s m/s	luaMavsdkApGotoPosIntAltRelVel	mavlinkTelem.apGotoPosAltVel (value1, value2, value3, value4, value5, value6)	#86 MAVLINK_MSG_ID_SET_POSITION_ TARGET_GLOBAL_INT	time_boot_ms = get_tmr10ms()*10 target_system = _sysid target_component = autopilot.compuid coordinate_frame = MAV_FRAME_GLOBAL_ RELATIVE_ALT_INT type_mask = 0x0DC0 lat_int = value1 lon_int = value2 alt = value3 vx = value4 vy = value5 vz = value6 afx = 0 afy = 0 afz = 0 yaw = 0 yaw_rate = 0	uint32_t [ms] uint8_t uint8_t uint8_t enum uint16_t bitmap int32_t [°E7] int32_t [°E7] float [m] float [m/s] float [m/s] float [m/s] float [m/s] float [m/s²] float [m/s²] float [m/s²] float [rad]	
apSetYawDeg	value1[number]{yaw}, value2[number]{relative}	° °	luaMavsdkApSetYawDeg	if (value2 ~= nil and value2) mavlinkTelem.apSetYawDeg(value1, true) else mavlinkTelem.apSetYawDeg(value1, false)	115 MAV_CMD_CONDITION_YAW	1: Angle = if arg2 then fmodf(abs(value1), 360.0f) else fmodf(value1, 360.0f) 2: Angular Speed = 0 3: Direction = if arg2 then (if value1<0 then CCW else CW) else CCW 4: Relative = if arg2 then 1 else 0	[°] [°/s]	
apCopterFlyClick	none	-	luaMavsdkApCopterFlyClick	mavlinkTelem.apCopterFlyClick()	42001 MAV_CMD_SOLO_BTN_FLY_CLICK	-	-	
apCopterFlyHold	value[number]{alt}	m	luaMavsdkApCopterFlyHold	mavlinkTelem.apCopterFlyHold(value)	42002 MAV_CMD_SOLO_BTN_FLY_HOLD	1: Takeoff Altitude: value	[m]	
apCopterFlyPause	none	-	luaMavsdkApCopterFlyPause	mavlinkTelem.apCopterFlyPause()	42003 MAV_CMD_SOLO_BTN_PAUSE_CLICK	1: Shot Mode = 0	-	
qshotSendCmdConfigure	value1[integer]{mode}, value2[integer]{shot_state}	enum MAV_QSHOT_MODE -	luaMavsdkQShotSendCmdConfigure	mavlinkTelem.sendQShotCmdConfigure (value1, value2)	62020 MAV_CMD_QSHOT_DO_CONFIGURE	1: mode = value1 2: shot_state = value2	[enum]	
qshotSendStatus	value1[integer]{mode}, value2[integer]{shot_state}	enum MAV_QSHOT_MODE -	luaMavsdkQShotSendStatus	mavlinkTelem.sendQShotStatus(value1, value2)	#62020 QSHOT_STATUS	1: mode = value1 2: shot_state = value2	uint16_t [enum] uint16_t	
qshotGetStatus	table {mode[integer], shot_state[integer]}	enum MAV_QSHOT_MODE -	luaMavsdkQShotGetStatus	mavlinkTelem.qshot.mode mavlinkTelem.qshot.shot_state	#62020 QSHOT_STATUS	shot_state	uint16_t uint32_t [ms]	
qshotButtonState	value[integer]{state}	-	luaMavsdkQShotButtonState	mavlinkTelem.sendQShotButtonState(value)	#257 BUTTON CHANGE	time_boot_ms = get_tmr10ms()*10 last_change_ms = 0 state = value	uint32_t [ms] uint8_t	

AP
EXPERIMENTAL

Qshot
EXPERIMENTAL

Debug EXPERIMENTAL								
	getTaskStats	table (time[integer], max[integer], load[integer])	500ns 500ns 500ns	luaMavsdGetTaskStats	mavlinkTaskRunTime() mavlinkTaskRunTimeMax() mavlinkTaskLoad()	- - -	- - -	uint16_t uint16_t uint16_t