OlliW OpenTX MavSDK LUA reference
(rev. 1.0 based on v24 firmware)

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General OpenTX LUA additions are to be 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
Generic	getEvent	value[integer]{event}	enum, see keys.h
	lockKeys	value[unsigned]{mask}	-
	unlockKeys	-	-
	isInMenu	value[bool]	-

	MavSDK function	return value / parameter	Unit
Generic 1	mavtelemIsEnabled	value[bool]	-
	isReceiving	value[bool]	-
	isInitialized	value[bool]	-
	getVersion	value[string]	-
Generic 2	getAutopilotType	value[number]	enum MAV_AUTOPILOT
	getVehicleType	value[number]	enum MAV_TYPE
	getFlightMode	value[number]	enum PLANE_MODE or COPTER_MODE or SUB_MODE or ROVER_MODE or TRACKER_MODE
	getVehicleClass	value[number]	enum MAV_TYPE
	getSystemStatus	value[number]	enum MAV_STATE
	isArmed	value[bool]	-
IMU	getAttRollDeg	value[number]	°
	getAttPitchDeg	value[number]	°
	getAttYawDeg	value[number]	°
Vfr	getVfrAirSpeed	value[number]	m/s
	getVfrGroundSpeed	value[number]	m/s
	getVfrAltitudeMsl	value[number]	m
	getVfrClimbRate	value[number]	m/s
	getVfrHeadingDeg	value[number]	°
	getVfrThrottle	value[integer]	%
GPS generic	getGpsCount	value[integer]	bitmap
	getPositionLatLonInt	table (lat[integer], lon[integer])	°E7 °E7
	getPositionAltitudeMsl	value[number]	m
	getPositionAltitudeRelative	value[number]	m
	getPositionHeadingDeg	value[number]	°
	getPositionSpeedNed	table (vx[number], vy[number], vz[number])	m/s m/s m/s
GPS, 1st or only	isGpsAvailable	value[bool]	-
	getGpsStatus	table (fix[number], hdop[number], vdop[number], sat[number])	enum GPS_FIX_TYPE - - -
	getGpsFix	value[number]	enum GPS_FIX_TYPE
	getGpsHDop	value[number]	-
	getGpsVDop	value[number]	-
	getGpsSat	value[number]	-
	getGpsLatLonInt	table (lat[integer], lon[integer])	°E7 °E7
	getGpsAltitudeMsl	value[number]	m
	getGpsSpeed	value[number]	m/s
	getGpsCourseOverGroundDeg	value[number]	°

	MavSDK function	return value / parameter	Unit
GPS, 2nd	isGps2Available	value[bool]	-
	getGps2Status	table (fix[number], hdop[number], vdop[number], sat[number])	enum GPS_FIX_TYPE - - -
	getGps2Fix	value[number]	enum GPS_FIX_TYPE
	getGps2HDop	value[number]	-
	getGps2VDop	value[number]	-
	getGps2Sat	value[number]	-
	getGps2LatLonInt	table (lat[integer], lon[integer])	°E7 °E7
	getGps2AltitudeMsl	value[number]	m
	getGps2Speed	value[number]	m/s
	getGps2CourseOverGroundDeg	value[number]	°
Battery	isBatAvailable	value[bool]	-
	isBat2Available	value[bool]	-
	getBatCount	value[integer]	-
Battery, 1st or only	getBatChargeConsumed	value[number]	mAh
	getBatEnergyConsumed	value[number]	J
	getBatTemperature	value[number]	°C
	getBatVoltage	value[number]	V
	getBatCurrent	value[number|nil]	A
	getBatRemaining	value[integer]	%
	getBatCellCount	value[integer]	-
	getBatTimeRemaining	value[integer|nil]	s
	getBatChargeState	value[integer|nil]	enum MAV_BATTERY_CHARGE_STATE
	getBatFaultBitMask	value[integer|nil]	enum MAV_BATTERY_FAULT
	getBatCapacity	value[number]	
Battery, 2nd	getBat2ChargeConsumed	value[number]	mAh
	getBat2EnergyConsumed	value[number]	J
	getBat2Temperature	value[number]	°C
	getBat2Voltage	value[number]	V
	getBat2Current	value[number|nil]	A
	getBat2Remaining	value[integer]	%
	getBat2CellCount	value[integer]	-
	getBat2TimeRemaining	value[integer|nil]	s
	getBat2ChargeState	value[integer|nil]	enum MAV_BATTERY_CHARGE_STATE
	getBat2FaultBitMask	value[integer|nil]	enum MAV_BATTERY_FAULT
	getBat2Capacity	value[number]	
Mission	getMission	table (count[integer], current_seq[integer])	- -
	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
	getNavController	table (nav_bearing[number], target_bearing[number], wp_dist[number])	° ° m
Messages	isStatusTextAvailable	value[bool]	-
	getStatusText	value[integer|nil] value[string|nil]	enum MAV_SEVERITY -
RF Link	getRadioRssi	value[integer]	-
	getRadioRemoteRssi	value[integer]	-
	getRadioNoise	value[integer]	2dB on SiK
	getRadioRemoteNoise	value[integer]	2dB on SiK
	getRadioRssiScaled	value[integer|nil]	
	optionGetRssiScale	value[integer]	
	optionSetRssiScale	value[integer]	
	optionIsRssiEnabled	value[bool]	-
	optionEnableRssi	value[integer]{bool}	-
	radioDisableRssiVoice	value[integer]{bool}	-

	MavSDK function	return value / parameter	Unit
AP	apIsFlying	value[bool]	-
	apIsFailsafe	value[bool]	-
	apPositionOk	value[bool]	-
	apSetFlightMode	value[integer]	enum PLANE_MODE or COPTER_MODE or SUB_MODE or ROVER_MODE or TRACKER_MODE
	apRequestBanner	none	-
	apArm	value[integer]{bool}	-
	apCopterTakeOff	value[number]{alt}	m
	apLand	none	-
	apGetRangefinder	value[number]	m
Camera	cameraIsReceiving	value[bool]	-
	cameraIsInitialized	value[bool]	-
	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 - - -
	cameraGetStatus	table (system_status[integer], mode[integer], video_on[boolean], photo_on[boolean], available_capacity[number|nil], battery_voltage[number|nil], battery_remaininpct[integer|nil])	 enum MAV_STATE enum CAMERA_MODE - - MiB V %
	cameraSendVideoMode	none	-
	cameraSendPhotoMode	none	-
	cameraStartVideo	none	-
	cameraStopVideo	none	-
	cameraTakePhoto	none	-
Gimbal generic	gimbalIsReceiving	value[bool]	-
	gimbalIsInitialized	value[bool]	-
	gimbalGetInfo	table (compid[integer], vendor_name[string], model_name[string], custom_name[string], firmware_version[string], hardware_version[string], capability_flags[integer])	 . . . .
	gimbalGetStatus	table (system_status[number], custom_mode[number], is_armed[bool], prearm_ok[bool])	 - - - -
	gimbalGetAttRollDeg	value[number]	°
	gimbalGetAttPitchDeg	value[number]	°
	gimbalGetAttYawDeg	value[number]	°
Gimbal protocol v1	gimbalSendNeutralMode	none	-
	gimbalSendMavlinkTargetingMode	none	-
	gimbalSendRcTargetingMode	none	-
	gimbalSendGpsPointMode	none	-
	gimbalSendSysIdTargetingMode	none	-
	gimbalSendPitchYawDeg	value1[number]{pitch}, value2[number]{yaw}	° °

	MavSDK function	return value / parameter	Unit
STorM32 gimbal protocol v2	gimbalIsProtocolV2	value[bool]	-
	gimbalSetProtocolV2	value[number]	-
	gimbalClientIsReceiving	value[bool]	-
	gimbalClientIsInitialized	value[bool]	-
	gimbalClientGetInfo	table (gimbal_manager_id[integer], gimbal_id[integer], device_capability_flags[integer], manager_capability_flags[integer])	enum MAV_COMPONENT enum MAV_COMPONENT enum MAV_STORM32_\ GIMBAL_DEVICE_CAP_FLAGS enum MAV_STORM32_\ GIMBAL_MANAGER_CAP_FLAGS
	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
	gimbalClientSetRetract	value[integer]{flags}	-
	gimbalClientSetNeutral	value[integer]{flags}	-
	gimbalClientSetLock	value1[integer]{roll_lock}, value2[integer]{pitch_lock}, value3[integer]{yaw_lock}	- - -
	gimbalClientSetFlags	value[integer]{flags}	-
	gimbalClientSendPitchYawDeg	value1[number]{pitch}, value2[number]{yaw}	° °
	gimbalClientSendControlPitchYawDeg	value1[number]{pitch}, value2[number]{yaw}	° °
	gimbalClientSendCmdPitchYawDeg	value1[number]{pitch}, value2[number]{yaw}	° °
	gimbalDeviceSendPitchYawDeg	value1[number]{pitch}, value2[number]{yaw}	° °