Certified Capability List

This Capability List is based on a certification session performed by the *TALQ Certification Tool (v2.7.1-online) on 2026-04-17 12:16:32.816 +0200.*

The Capability List is a consolidated list of TALQ features which are implemented in a product.

The tool has succesfully performed *41 tests*.

Product details

Product Name	Teliko-gateway
Company	Teliko
Type	GATEWAY
Notes	
Generated on	2026-04-17 12:16:32.816 +0200
Supported profiles	• Lighting
API version certified:	2.7.1
Certification performed by app version:	2.7.1-online

Functional tests

The Functional Tests help customers understand the capabilities of a TALQ-certified product. All functional test cases are presented to provide comprehensive context, and successful completion of each test is indicated with a tick mark. Each Functional Test is related to a set of required TALQ technical test cases.

Configuring

4 of 11

Connect to CMS and announce light point control capabilities ✔

The Gateway successfully connects to a CMS and transmits its capabilities (i.e. supported features) for light point configuration, control, programming and monitoring.

CONFIG-1

Connect to CMS and announce cabinet control capabilities

The Gateway successfully connects to a CMS and transmits its capabilities (i.e. supported features) for lighting cabinet controller configuration, control, programming, and monitoring.

CONFIG-2

Connect to CMS and announce dynamic sensor-based lighting capabilities

The Gateway successfully connects to a CMS and transmits its capabilities (i.e. supported features) for dynamic lighting based on sensor.

CONFIG-3

Announce the list of light point controllers on the network ✔

The Gateway transmits all the devices (light point controllers, cabinet controller and any other type of device) that are known on the network, to the CMS together with their configuration and asset information.

CONFIG-4

Configure light point controllers electrical alarm thresholds from the CMS ✔

The Gateway can receive the electrical alarm thresholds from the CMS and assign them to selected light point controllers. This includes Lamp Voltage Too High/Low, Lamp Current Too High/Low, Active Power Too High/Low and Power Factor Too Low.

CONFIG-5

Configure the cabinet controllers alarm thresholds from the CMS ✔

The Gateway can receive the electrical alarm thresholds from the CMS and assign them to selected cabinet controllers.

CONFIG-6

Configure the light point controllers' parameters from the CMS

CONFIG-7

The Gateway can receive configuration parameters from the CMS and assign them to selected light point controllers.

Create and change group of light point controllers from the CMS

The Gateway can handle a command from the CMS to create or to change a group of light point controllers to assign them a control program. **CONFIG-8**

Change the sampling frequency for telemetry measurements

The Gateway can change the sampling of telemetry measurements on light point controllers and cabinet controllers and properly reflected in the next data log sent to the CMS. **CONFIG-9**

Change the reporting frequency for telemetry measurements

The Gateway can change the reporting frequency, i.e. how often it sends data logs to the CMS, for telemetry measurements on light point controllers. **CONFIG-10**

Update the firmware of the physical devices

The Gateway supports data package service and accepts a data package to update firmware on a physical device such as a light point controller. **CONFIG-11**

Monitoring **1 of 11**

Report basic electrical values to the CMS

The Gateway measures mains voltage, current, active power, and power factor, and sends these values to the CMS via the data logging service. **MONITOR-1**

Report cumulative energy usage (kWh)

The Gateway sends the total energy used as a cumulative counter (kWh) to the CMS via the data logging service. **MONITOR-2**

Report lamp operating hours (runtime)

The Gateway reports each lamp's total hours of operation as a cumulative counter to the CMS via the data logging service. **MONITOR-3**

Report lamp switch-on count

The Gateway reports how many times each lamp has been switched on, as a cumulative counter to the CMS via the data logging service. **MONITOR-4**

Report power loss count

The Gateway reports the total number of power interruptions detected for each lamp as a cumulative counter to the CMS via the data logging service. **MONITOR-5**

Confirm dimming level after manual override command ✔

When a manual override is sent (e.g., set dimming level to X%), the Gateway forwards the command to the device and confirms, via on-demand request and data-logging service, that the actual dimming level matches (or closely follows) the requested level. **MONITOR-6**

Report temperature values

The Gateway sends temperature measurements from connected devices or sensors to the CMS via the data logging service. **MONITOR-8**

Report presence detection

The Gateway sends presence events or values from sensors to the CMS via the data logging service. **MONITOR-9**

Report ambient noise level

The Gateway sends noise level values to the CMS via the data logging service. **MONITOR-10**

Report dimming levels

The Gateway sends dimming level values to the CMS via the data logging service. **MONITOR-11**

Report firmware update status and progress

The Gateway reports firmware update events (start, progress, completion or failure) to the CMS. **MONITOR-12**

Controlling **3 of 7**

Manually set a single light point ✔

The Gateway accepts a manual override command from the CMS (e.g., set dimming level or switch ON/OFF) and applies it to one specific light point. **CONTROL-1**

Manually set the dimming level on a group of light points

The Gateway accepts a manual override command from the CMS and applies it to a defined group of light points. **CONTROL-2**

Manually set the dimming level on a single light point with a delay ✔

The Gateway accepts a manual override command from the CMS that includes a delay (e.g., "in 10 minutes") and applies the change to one light point at the requested time. **CONTROL-3**

Manually change dimming level with a smooth ramp ✔

The Gateway accepts a manual override command from the CMS that includes a ramp-up/ramp-down time and adjusts the dimming level on one light point smoothly to the requested level. **CONTROL-4**

Switch a light automatically using a photocell

The Gateway runs a local control program that turns a single light point ON and OFF based on the status of a local photocell. **CONTROL-5**

Adjust dimming level on presence detection

The Gateway runs a local control program that raises or lowers the dimming level of a single light point when a presence sensor is triggered. **CONTROL-6**

Adjust dimming level on noise detection

The Gateway runs a local control program that changes the dimming level of a single point when a noise sensor is triggered. **CONTROL-7**

Alarming **3 of 5**

Detect and report lighting alarms ✔

The Gateway detects lighting-related issues (e.g., lamp/driver issues, high temperature) and send alarms to the CMS via the data-logging service. **ALARM-1**

Detect and report electrical alarms ✔

The Gateway detects electrical issues (e.g., over/under-voltage, over-current, power loss) and sends alarms to the CMS via the data-logging service. **ALARM-2**

Report invalid schedules or control programs

If a calendar or control program is missing, invalid, or inconsistent, the Gateway raises an alarm and sends it to the CMS via the data-logging service. **ALARM-3**

Report sensor-activity events

When activity is detected by local sensors (e.g., presence or noise), the Gateway sends an event to the CMS via the data-logging service. **ALARM-4**

Provide alarm status on request ✔

When the CMS asks for it, the Gateway returns the actual status of the alarms (e.g., active/inactive). **ALARM-5**

Programming

2 of 9

Run a daily fixed time on/off and dimming schedule

The Gateway receives a schedule that turns a light point ON/OFF and sets dimming level at specific times, the same every day of the year. **PROGRAM-1**

Run an astro-clock on/off schedule with fixed-time dimming (daily)

The Gateway switches a light point ON/OFF at sunrise/sunset with an adjustable time offset (± minutes) and applies a time-based dimming plan during the astro-clock active period, every night. **PROGRAM-2**

Run a photocell-based on/off schedule with fixed-time dimming (daily)

The Gateway turns a light point ON when the photocell indicates darkness and OFF when it is bright and follows a time-based dimming plan during the photocell's active period, every night. **PROGRAM-3**

Combine photocell and astro-clock switching with fixed-time dimming (daily)

The Gateway turns a light point ON/OFF based on whichever trigger happens first, photocell darkness/brightness or astro sunrise/sunset with offset and follows a time-based dimming plan during the active period, every night. **PROGRAM-4**

Run an OFF period that crosses midnight (or midday)

The Gateway turns lights OFF for a time window that crosses midnight (or midday). When the schedule resumes, the lights return to the last scheduled dimming level. **PROGRAM-5**

Support special date ranges (seasonal exceptions) ✔

The Gateway handles calendars with a year-round default rule plus a higher-priority rule that applies between two dates (e.g., Sept 10-Oct 16). **PROGRAM-6**

Support weekly exceptions (e.g., weekends)

The Gateway handles calendars with a year-round default rule plus a higher-priority rule that applies on specific weekdays (e.g., every Saturday and Sunday). **PROGRAM-7**

Support combined weekly and seasonal exceptions with priorities ✔

The Gateway handles layered calendars: a year-round default rule; a higher-priority weekend rule (e.g., every Sat/Sun); an even higher-priority rule for a special period (Day 1-Day 2); and, within that period, a highest-priority rule for specific days (e.g., Saturdays). The most specific rule takes precedence. **PROGRAM-8**

Run a sensor-based dynamic lighting control program

The Gateway executes a control program that changes dimming level based on sensor detection (e.g., presence). **PROGRAM-9**

Capability list

Security

Enabled ✔

Functions

Basic

The Basic function describes the properties related to the physical asset to which the logical device is associated, such as identification (assetId) and location information.

Attributes

#	Attribute	Description
✔	displayName	Display name of the asset.
✔	assetId	Customer identifier of the asset. If multiple devices have the same assetId it means they belong to the same asset.
✔	serial	Serial number of the device.
✔	hwType	Hardware type of the device.
✔	swVersion	Software version installed on the device.
✔	deviceReset	The physical device containing the logical device was reset.
✔	currentTime	Current time of the device defined as local time with time zone designator. [DEPRECATED: This attribute has been deprecated and it will be removed in the next MAJOR release. Please use the new TimeFunction.currentTime instead.]

Events

#	Event type	Description
✔	deviceReset	The physical device containing the logical device was reset

Communication

The Communication Function contains attributes related to the communication within the ODN, and between ODN devices and Gateways. Although communication within the ODN is outside the scope of the TALQ Smart City Protocol, this Function enables access to a minimum set of configuration and state information of the ODN communication interface in order to facilitate system management from the CMS.

Attributes

#	Attribute	Description
✔	communicationType	Type of communication technology implemented by the ODN (e.g. power line, wireless).
✔	logicalAddress	Logical address for communication within the ODN scope (IP address, Short Address, ...).
✔	altLogicalAddress	Additional logical address used for communication within the ODN, for instance, group communication address (not a TALQ group address).

✔	physicalAddress	Physical address of the device. For example, IEEE MAC address. This attribute can be used to map between logical and physical devices. The format is specific to the ODN implementation.
✔	parentAddress	TALQ Address of the parent device, e.g. gateway. It shall point to a specific communication function.
✔	timeToLive	Number of times a packet can be forwarded within the ODN.
✔	repeatingEnabled	Describes whether repeating functionality is enabled at the device.
✔	transmitPower	Transmit power used by the device within the ODN.
✔	numberOfHops	Number of hops between the gateway and the ODN device represented by the device including this function.
✔	communicationQuality	Indicator of the quality of the communication with the device. 100% means good quality.
✔	communicationFailure	This attribute is updated by the ODN when the communication function is not operating as expected.
✔	applicationType	Application Type of the communication function depending on the use case. E.g.: PL Communication Monitor

Events

#	Event type	Description
✔	communicationFailure	This event is generated by the ODN when the communication function is not operating as expected

Gateway

The Gateway function includes the necessary attributes to enable the communication between the CMS and the Gateway according to the TALQ Specification.

Attributes

#	Attribute	Description
✔	cmsUri	Base URI for TALQ communication that allows the Gateway to access the CMS. Must be an absolute URI. Other URI's for accessing CMS can be relative to this base.

✔ cmsAddress	CMS UUID address
✔ gatewayUri	Base URI for TALQ communication that allows the CMS to access the Gateway. Must be an absolute URI. Other URI's for accessing Gateway can be relative to this base.
✔ gatewayAddress	Gateway UUID address
✔ retryPeriod	Time duration before the Gateway retransmits a message for which expected response has not been received. [DEPRECATED: This attribute has been deprecated and it will be removed in the next MAJOR release. Please use the new GatewayFunction.gatewayRetryPeriod instead.]
✔ gatewayRetryPeriod	Time duration before the Gateway retransmits a message for which the expected response has not been received. This attribute can be used by the CMS to avoid requests overload. Although this attribute will be mandatory for Gateway in future MAJOR versions, to keep backward compatibility it is considered optional for the existing profiles.
✔ cmsRetryPeriod	Time duration before the CMS retransmits a message for which the expected response has not been received. This attribute can be used by the Gateway to avoid requests overload. Although this attribute will be mandatory for CMS in future MAJOR versions, to keep backward compatibility it is considered optional for the existing profiles.
✔ gatewayNumberOfRetries	Maximum number of retries for a failed request sent by the Gateway for which expected response has not been received. Default value shall be 3. This attribute can be used by the CMS to avoid requests overload. Although this attribute will be mandatory for Gateway in future MAJOR versions, to keep backward compatibility it is considered optional for the existing profiles.
✔ cmsNumberOfRetries	Maximum number of retries for a failed request sent by the CMS for which expected response has not been received. Default value shall be 3. This attribute can be used by the Gateway to avoid requests overload. Although this attribute will be mandatory for CMS in future MAJOR versions, to keep backward compatibility it is considered optional for the existing profiles.

✔	crlUrn	URI where the Gateway can obtain the Certification Revocation List (CRL).
✔	vendor	Vendor identification.

Lamp Actuator

The Lamp Actuator function includes attributes related to lighting control and it represents the smallest unit for control purposes. In practice, however, a Lamp Actuator function can control combinations of several lamps and control gear but all in the same way, as if they are all one individual unit.

Attributes

#	Attribute	Description
✔	lampTypeId	TALQ Address of an existing lampType.
✔	outputPort	Identifier of the output port that is controlled by the lamp actuator.
✔	cloEnabled	Determines whether a Constant Light Output (CLO) correction factor is used. CLO is used to compensate for lumen output degradation over the life time of the lamp. If CLO is enabled, lamps are dimmed part of the lampType.
✔	defaultLightState	Sets the default light output for the lamp actuator. This shall be applicable if no other command is active. This attribute shall be set to 100% as default value.
✔	targetLightCommand	Latest command for the lamp actuator.
✔	feedbackLightCommand	This attribute reflects the command in effect and it might deviate from the actualLightState due to propagation time or due to internal ODN specific mechanisms to handle the priority of the requests.
✔	actualLightState	This attribute should reflect the physical state of the light source as much as possible, including factors such as CLO. It may be calculated or measured, depending on the specific ODN implementation, which is outside the scope of this specification.

✔	calendarID	TALQ Address of the calendar controlling this lamp actuator. If this attribute is empty, the behavior shall be determined by the ODN. If the attribute is invalid, the ODN shall trigger a generic invalid address event and the behavior shall be determined by the ODN.
✔	invalidCalendar	The lamp actuator function has been allocated a calendar that it cannot implement.
✔	invalidProgram	The lamp actuator function has been allocated a control program that it cannot implement.
✔	lightStateChange	Light state has changed.
✔	targetLightCommandChange	The targetLightCommand operational attribute has changed.
✔	programChange	The control program applicable to the lamp actuator has changed (these are the points at which the calendar changes the program).
✔	calendarChange	The calendar applicable to the lamp actuator has changed.
✔	invalidLampType	Indicates that the lamp type referred cannot be applied.
✔	applicationType	Application Type of the lamp actuator depending on the use case. E.g.: Lamp actuator, Cabinet actuator

Events

#	Event type	Description
✔	lightStateChange	Light state has changed
✔	calendarChange	The calendar applicable to the lamp actuator has changed
✔	invalidLampType	Indicates that the lamp type referred cannot be applied.

Lamp Monitor

The Lamp Monitor function enables monitoring of lamp parameters. A Lamp Monitor function should be associated with a specific lamp/control gear combination. Multiple lamp monitor functions may be implemented by a single device.

Attributes

#	Attribute	Description
✔	supplyType	Supply type of the lamp. Accepted values are: AC, DC.
✔	lampTypeId	TALQ Address of an existing lamp type. If not set to a valid value, this shall be the lamp type used in the lamp actuator. If this attribute is not supported in the implementation, the lamp monitor shall use the lamp type specified in the corresponding lamp actuator.
✔	monitoringReference	Name of the entity (or physical device) being monitored by this function.
✔	numberOfLamps	Number of lamps being monitored by the lamp monitor function.
✔	switchOnCounter	Cumulative number of ON/OFF cycles since installation of the lamp. The wrap around value is 2e32 - 1.
✔	operatingHours	Number of hours the lamp is on. This is the value used in CLO and may be set by the CMS.
✔	temperature	Temperature of the device implementing this function. [DEPRECATED: This attribute has been deprecated and it will be removed in the next MAJOR release. Please use the new TemperatureSensorFunction.temperature instead.]
✔	supplyVoltage	RMS supply volts when supplyType is AC, supply voltage (V) when supplyType is DC.
✔	supplyCurrent	RMS supply current (A) when supplyType is AC, supply current (A) when supplyType is DC.
✔	activePower	Active power.
✔	reactivePower	Reactive power.
✔	apparentPower	Apparent Power.
✔	powerFactor	Active power/Apparent power.
✔	powerFactorSense	Phase sense of power factor.
✔	activeEnergy	Cumulative active energy (since installation or counter reset).
✔	supplyLossCount	Incrementing count of supply losses. The wrap around value is 2e32 - 1.

✔ lampPowerTooHigh	Lamp power is greater than expected lamp power + lampPowerTolerance.
✔ lampPowerTooLow	Lamp power is smaller than expected lamp power - lampPowerTolerance
✔ lampVoltageTooHigh	Level of lamp voltage (not supply voltage) is greater than highLampVoltageThreshold.
✔ lampVoltageTooLow	Level of lamp voltage (not supply voltage) is smaller than lowLampVoltageThreshold.
✔ lampFailure	The lamp is not operating as it is supposed to (e.g. the lamp is broken). This event shall be used to detect a situation where the lamp (or LED module(s)) should be lit, but produce no light. This could be detected by the current flowing or power consumed.
✔ currentTooHigh	Supply current is above the highCurrentThreshold defined in the lamp type.
✔ currentTooLow	Supply current is below the lowCurrentThreshold defined in the lamp type.
✔ powerFactorTooLow	The power factor is below powerFactorThreshold.
✔ highTemperature	Indicates temperature is above the high threshold [DEPRECATED: This attribute has been deprecated and it will be removed in the next MAJOR release. Please use the new TemperatureSensorFunction.temperatureTooHigh instead.]
✔ relayFailure	Set in case of internal relay is failing (e.g. it may be stuck in either on or off position). Typically if contactor error isused as well.
✔ absoluteLampPowerTooHigh	Indicates the power is above the lampPowerHighThreshold in the lamp type
✔ absoluteLampPowerTooLow	Indicates the power is below the lampPowerLowThreshold in the lamp type
✔ controlGearCommFailure	Indicates failure of the control gear.
✔ cyclingFailure	Indicates the lamp is constantly switching ON and OFF in an unexpected manner. This event shall be used to indicate a lamp which cycles while it should be on. The actual detection algorithm is outside the scope of this specification.

✔	supplyLoss	Indicates loss of mains power.
✔	contactorError	Indicates error in contactor
✔	lampUnexpectedOn	Indicates lamp is unexpectedly on.
✔	leakageDetected	Indicates that an earth leakage fault has been detected.
✔	invalidLampType	Indicates that the lamp type referred cannot be applied.
✔	supplyVoltageTooHigh	Level of supply voltage is above the highLampVoltageThreshold.
✔	supplyVoltageTooLow	Level of supply voltage is below the lowSupplyVoltageThreshold.
✔	highSupplyVoltageThreshold	Supply voltage above which the supplyVoltageTooHigh event is triggered.
✔	lowSupplyVoltageThreshold	Supply voltage below which the supplyVoltageTooLow event is triggered.

Events

#	Event type	Description
✔	lampPowerTooHigh	Lamp power is greater than expected lamp power + lampPowerTolerance
✔	lampPowerTooLow	Lamp power is smaller than expected lamp power - lampPowerTolerance
✔	lampVoltageTooHigh	Level of lamp voltage (not supply voltage) is greater than highLampVoltageThreshold.
✔	lampVoltageTooLow	Level of lamp voltage (not supply voltage) is smaller than lowLampVoltageThreshold.
✔	currentTooHigh	Supply current is above the highCurrentThreshold defined in the lamp type
✔	currentTooLow	Supply current is below the lowCurrentThreshold defined in the lamp type
✔	powerFactorTooLow	The power factor is below powerFactorThreshold
✔	lampFailure	The lamp is not operating as it is supposed to (e.g. the lamp is broken). This event shall be used to detect a situation where the lamp (or LED module(s)) should be lit, but produce no light. This could be detected by the current flowing or power consumed.

✔	highTemperature	Indicates temperature is above the high threshold
✔	relayFailure	Set in case of internal relay is failing
✔	absoluteLampPowerTooHigh	Indicates the power is above the lampPowerHighThreshold in the lamp type
✔	absoluteLampPowerTooLow	Indicates the power is below the lampPowerLowThreshold in the lamp type
✔	controlGearCommFailure	Indicates failure of the control gear
✔	cyclingFailure	Indicates the lamp is constantly switching ON and OFF in an unexpected manner
✔	supplyLoss	Indicates loss of mains power
✔	contactorError	Indicates error in contactor
✔	lampUnexpectedOn	Indicates lamp is unexpectedly on
✔	leakageDetected	Indicates that an earth leakage fault has been detected
✔	invalidLampType	Indicates that the lamp type referred cannot be applied.
✔	supplyVoltageTooHigh	Level of supply voltage is above the highLampVoltageThreshold.
✔	supplyVoltageTooLow	Level of supply voltage is below the lowSupplyVoltageThreshold.

Electrical Meter

The electrical meter function supports electrical metering capabilities including measurements of voltage, current, power, energy, and power factor. This function may be associated with Luminaire Controllers, Cabinet Controllers or electrical meters installed in switch boxes. ODNs may implement both single phase and three phase meters. Typically meters within a control device will be single phase and stand-alone meters. A street side cabinet may have single phase or three phase meters.

Attributes

#	Attribute	Description
✔	totalPower	Sum of the active power consumed on phase 1, 2 and 3, or just the power for a single phase meter.
✔	totalActiveEnergy	Total cumulative kWh measured by the meter since installation date (or counter reset).
✔	totalPowerFactor	Total active power divided by total apparent power.

✔	supplyVoltage	Average between Phase1 RMS Voltage, Phase2 RMS Voltage and Phase3 RMS Voltage, or in the case of a single phase meter just the RMS supply voltage.
✔	totalCurrent	Sum of the RMS currents on phase 1, 2 and 3.
✔	averageCurrent	Average RMS current on phase 1, 2 and 3.

Events

#	Event type	Description

Photocell

A Photocell function models the capabilities of a photocell that can be used for lighting control. This function shall be supported by the CMS and optionally by the ODNs (Gateway).

Attributes

#	Attribute	Description
✔	onLevel	Illuminance level at which the photocell switches to on state.
✔	offLevel	Illuminance level at which the photocell switches to off state.
✔	photocellOutput	Output state of the photocell. Possible values are ON (means the illuminance level has fallen below the onLevel) and OFF (means the illuminance level has risen above the offLevel).
✔	photocellOutputOn	The photocell output has changed to ON.
✔	applicationType	Application Type of the photocell depending on the use case. E.g.: Presence detector

Events

#	Event type	Description

Time*

The Time function includes attributes related to generic control and it represents the smallest unit for control purposes.

Attributes

#	Attribute	Description

✔	timeZone	Time zone of the device. Time zone may be expressed in two formats. where is a time zone as defined in the zone.tab of the IANA timezone database [IANA]; and stdoffset[dst[offset][,start[/time],end[/time]]] as defined by the Open Group for posix systems [POSIX].
✔	currentTime	Current time of the device defined as local time with time zone designator.

Events

#	Event type	Description

Services

Configuration Service

The TALQ Configuration Service enables discovery and configuration of devices and services

Options

#	Option	Value	Description
✔	commissioningSupported*		This ODN can support commissioning from the CMS side.
✔	devicesPaginationSupported*		This ODN can support pagination of devices.

Control Service

The Control service describes the mechanisms to operate the actuator functions in order to enable schedule based and override control

Options

#	Option	Value	Description
✔	supportedTypes	• ccDate*	Control Program and calendar options supported are defined by announcing support for the given modes

✔	ccDateSupport	• f • u • l • l	Indicates the ccDate options supported

Events

#	Event Type	Description
✔	invalidCalendar	An invalid calendar has been provided by the CMS to the ODN
✔	invalidProgram	A control program has been provided by the CMS, which cannot be implemented by the ODN

Data Collection Service

The TALQ Data Collection Service is a provision to configure how ODN measurements, status information and events are logged, and when or under what conditions the logged data is transferred to the CMS

Options

#	Option	Value	Description
✔	supportedModes	• EventRecordingMode • VendorRecordingMode • ImmediateReportingMode	Recording and Reporting modes supported

Events

#	Event Type	Description
✔	invalidLoggerConfig	The CMS has provided a data logger configuration that cannot be implemented by the ODN

On Demand Data Request Service

This service provides the mechanism to access attributes in the logical devices by requesting attribute values from the ODN

Asset Management Service

The TALQ Asset Management Service provides a mechanism to transfer the types needed by the asset management functions

Objects

Lamp type

The lamp type consists of a set of attributes that together characterize a given lamp and control gear combination. When modelling a Lighting ODN with many luminaires, there are attributes' values that are the same for many lamps, e.g.: the expected consumed power of the lamp and control gear (wattage) would be the same for many lamp monitors. The concept of LampType is created to avoid including the same attributes' values in every lamp monitor and actuator of the same type, for this reason a reference to a lamp type is included in the lamp actuator and lamp monitor functions, as these attributes are required for proper operation of these functions. Thus, the definition of lamp types enables the CMS to efficiently set attributes in many lamp actuators/monitors by just setting the address of the 'lampType' attribute in each function. Lamp types can be created by both CMS and TALQ Gateway as separate entities. The TALQ Gateway shall announce any lamp type it has to the CMS as part of the initial configuration. In addition to the initial configuration, the TALQ Gateway shall also announce the lamp type whenever it changes. The CMS may also send lamp types to the TALQ Gateway.

Properties

#	Property	Description
✔	name	Descriptive name of the lamp type
✔	address	TALQ Address of the lamp type
✔	controlType	Type of control/dimming interface between the lamp actuator function and the control gear or within the control gear in case lamp actuator is embedded in the control gear

Event log data

Event log data contains a single event, with eventType and value, in each single log entry. It also includes information about whether the log denotes the start or end of the event. Furthermore additional information can be added with the info attribute.

Properties

#	Property	Description
✔	eventType	Identifier of event reported
✔	srcAddress	Address of Logical device or function within a logical device which is the source of the event or to which this event applies

✔	startEndFlag	If the event denotes either the start or end of a ‘special’ period, this flag shall be included
✔	info	a string providing more information on the event
✔	attributes	A sequence of attribute values logged together with the event

Command

A command defines a type of control action that can be applied to a function. Commands can be generated by a manual override action or by a control program.

Properties

#	Property	Description
✔	state	Light state to be applied to the lamp actuator
✔	reason	Indicates the command was triggered by override, sensor or control program
✔	cmsRefId	CMS reference, which can be used for data logging. The cmsRefId in a Command is a free text to be used by the CMS for any purpose, e.g: to differentiate contexts. It is a token that allows the CMS to match client requests to the original notification.
✔	refAddress	Reference to the source of the command, e.g. sensor or control program
✔	start	Time when the control action resulting from command shall start. This attribute is used only with override commands to set a time to start an override action. If not specified, the override command starts immediately.
✔	expiration	Time when the control action resulting from command shall be terminated. This attribute is used only with override commands to set a time to stop an override action. After the expiration of an override command, the system should go back to the state defined by the active control program. If not specified, there is no expiration for the override command.

✔	rampToLevelTime*	The time (in seconds) taken for the value to ramp to the specified level. The change will be finished rampToLevelTime seconds after: the scheduled time if the change comes from a control program; the reception of the request, or the command.start time attribute, if the change comes from an override command, or; the sensor event is raised if the control is sensor-based. If actions related to one command remain to be completed when a subsequent command is received, the subsequent command shall take precedence.
✔	rampFromLevelTime*	The time (in seconds) taken for the value to ramp to the specified level. The change will be finished rampFromLevelTime seconds after: the scheduled time if the change comes from a control program; the reception of the request if the change comes from an override command; expiry of the related command, or; the sensor event is lowered and the hold time subsequently expires if the control is sensor-based. If actions related to one command remain to be completed when a subsequent command is received, the subsequent command shall take precedence.

Group

A group is set of entities that can be addressed by the same group address. Devices and functions within devices can be assigned to a group. A group may also include other groups as members.

Properties

#	Property	Description
✔	address	Group address
✔	members	TALQ Addresses of members of the group
✔	purpose	Main purpose of the group

*: The Certification Test Tool is designed to provide a high level of confidence that complementary systems can communicate successfully. As both the protocol and the test tool evolve, all mandatory and other core tests are confirmed by comparison with real-life scenarios (plug-fest or similar). Some tests of optional and more peripheral features may not yet have been confirmed in this way; such features are identified with an

asterisk (*).

This Capability List is based on a certification session performed by the TALQ Certification Tool (v2.7.1-online) on 2026-04-17 12:16:32.816 +0200.