

S4i INTEGRATION BROKER - COM-CAS-S4iUSB-XBAC

COMMERCIAL IB - CASAMBI to BACnet/IP INTEGRATION with S4i USB Gateway + S4i IB + XBAC option (local control only - no Casambi Cloud Service)

S4i INTEGRATION BROKER (IB)

- S4i Integration Broker is a licenced software application installed on a Host processor of your choice. Provides interactions between independent applications at the application-logic level. The Broker, with appropriate licences can facilitate a number of different system integrations simultaneously. No proprietary hardware, BYOD, multi-platform and zero code.

COMMERCIAL IB - CASAMBI to Building Management Systems (BMS) INTEGRATION using BACnet/IP

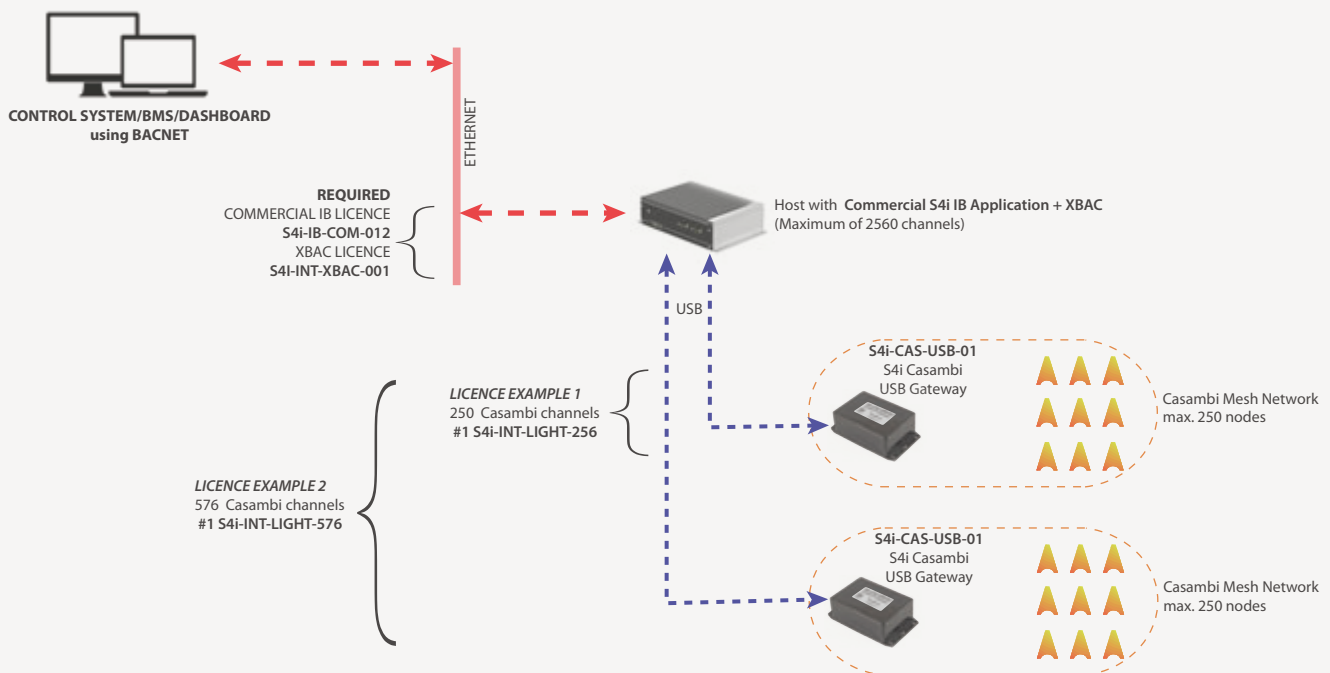
- S4i IB XBAC process can be used to map S4i IB endpoints to BACNet Server instances with the following:
 - Query current status of an endpoint. e.g. Dim level, RGBW value, TW value of a luminaire
 - Subscribe status change of an endpoint via BACNet COV.
 - Control (Change value) of an endpoint. e.g. Change dim level, RGBW value, TW value of a luminaire, call a Casambi scene (set SW instance value to 1).
- Integration provides local bi-directional control of Casambi lighting with accurate channel status, system & data monitoring (per fitting/subject to being made available by Casambi)
- The solution does not rely on Casambi Cloud services to operate - No permanent Internet connection is required for control operation
- Licence activation and renewal requires a temporary Internet connection
- Auto-mapping requires a temporary connection to Casambi cloud services only

Note the Casambi App. can operate Casambi lighting simultaneously with IB XBAC integration

TYPICAL COMMERCIAL IB and LICENCE USAGE for

CASAMBI to 3rd Party BACNET BMS Systems with S4i Casambi USB Gateway + S4i XBAC

supports 12 Integration Licences and up to 2560 Lighting channels



REQUIREMENTS

- 1 x IB Licence per Host processor - (Commercial IB Licence supports up to 12 Integration licences (#1, #2, #3 --- #12)
- 1 x S4i XBAC Licence per Host
- Lighting Integration Licence/s to the total number of Casambi channels controlled per Host
(Maximum of 2560 Lighting channels supported)

LICENCING

- Select Commercial or enterprise IB Licence for this Solution
- Select Lighting licence to the nearest number of TOTAL channels required for CASAMBI system on the IB
Note RGBW requires 4 to 5 channels (RGBW+Dim or HSV+Dim) to operate and TW (Tuneable White)
requires 2 Channels (TC+Dim)

NOTE: DO NOT EXCEED the total number of Integration Licences available in the IB Licence (max. 12)

INTEGRATION LICENCE OPTIONS

TYPE

S4i-IB-COM-012	-	COMMERCIAL IB Licence per Host - supports up to 12 Integration Licences
S4i-INT-XBAC-001	-	BMS Integration with BACnet IP - S4i XBAC Licence per Host
S4i-INT-LIGHT-064	-	Lighting Integration Licence - supports up to 64 channels
S4i-INT-LIGHT-128	-	Lighting Integration Licence - supports up to 128 channels
S4i-INT-LIGHT-256	-	Lighting Integration Licence - supports up to 256 channels
S4i-INT-LIGHT-576	-	Lighting Integration Licence - supports up to 576 channels
S4i-INT-LIGHT-1280	-	Lighting Integration Licence - supports up to 1280 channels
S4i-INT-LIGHT-2560	-	Lighting Integration Licence - supports up to 2560 channels

CONTROL FUNCTIONS

- Lighting control functionality is dependent on;
 - a) Casambi its mesh network internal capabilities
 - b) Gateway used to connect the IB
- XBAC supports - Read Property, Write Property, Read Property Multiple, Write Property Multiple, Subscribe COV

RECOMMENDATIONS:

Commercial Host processor

- Intel NUC 8 RUGGED FANLESS, CEL-N3350+, 8GB-16GB, 64GB - Win10 IoT Enterprise 2019 LTSC
- TBOX-12310 – Industrial Intel Celeron J1900 fan-less Box PC, 8GB-16GB, - Win10 IoT Enterprise 2019 LTSC
- Apple Mac Mini M1 8GB+
- CPU: X86_64, 4+ Cores, RAM: 8GB-16GB, SSD: 256GB+ - Win10 IoT Enterprise
- CPU: X86_64, 4+ Cores, RAM: 8GB-16GB, SSD: 256GB+ - AlmaLinux OS® 8.5 software (64-bit version) or greater

Gateway

- S4i USB Casambi Gateway - supports up to 250 Casambi channels
- OR
- S4i ETHERNET ENABLED Casambi Gateway with POE Adaptor - supports up to 250 Casambi channels

CONDITIONS:

- S4i Integration Broker (IB) Solution is a [software solution only](#)
- Licences cannot be shared between Hosts - All Licences only apply to the Host they reside on
- Sourcing and purchasing of recommended hardware is the sole responsibility of the integrator
- S4i only recommends hardware that has been tested
- S4i takes no responsibility for IB Solutions running on unrecommended hardware
- S4i does NOT provide support for the design, setup, configuration or operations associated with;
 - Casambi hardware & networks
 - DALI hardware & networks
 - Connected lighting systems hardware & networks
 - Ethernet hardware & networks
 - BMS systems hardware, networks & configuration