

# S4i INTEGRATION BROKER - COM-CAS-S4iETH-XAPI

## COMMERCIAL CASAMBI to 3rd PARTY SYSTEM INTEGRATION with S4i ETHERNET ENABLED Gateway + S4i IB + XAPI (local control only - no Casambi Cloud Service)

### S4i INTEGRATION BROKER (IB)

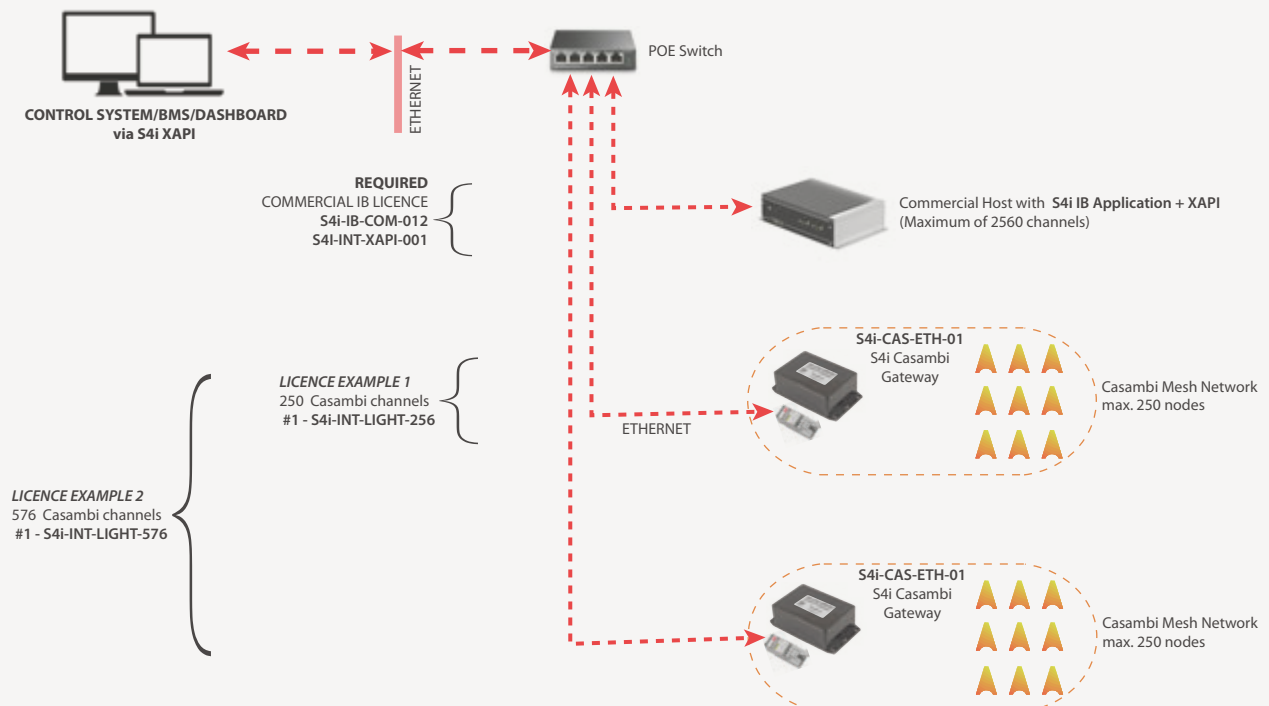
- S4i Integration Broker is a licenced software application, installed on a Host processor of your choice, to provide interactions between independent applications at the application-logic level. The Broker, with appropriate licences can facilitate a number of different integrations simultaneously. No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

### COMMERCIAL - CASAMBI to 3rd Party Control System INTEGRATION using XAPI

- Provides seamless control system integration with Casambi lighting network via an S4i ETHERNET enabled Gateway, an S4i IB and S4i XAPI Application Interface
- Ethernet enabled gateways can be remotely located up to max. of 90m from the S4i IB - Note a POE switch to support the POE Ethernet adaptor is required
- Integration provides local bi-directional control of Casambi lighting with accurate channel status
- 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 an Internet connection
- Auto-mapping requires a temporary connection to Casambi cloud services only

**Note the Casambi App can operate Casambi lighting simultaneously with IB XAPI integration with correct status updates**  
The benefit of this solution can be seen when high security is required and permanent Internet connection is not possible, or as a fail-safe method of maintaining control of Lighting if Internet connections are unreliable

### TYPICAL COMMERCIAL IB and LICENCE USAGE for CASAMBI to 3rd Party Control Systems with S4i Casambi ETHERNET ENABLED Gateway + S4i XAPI supports 12 Integration Licences and up to 2560 Lighting channels



## REQUIREMENTS

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

## LICENCING

- Select Commercial IB Licence for this Solution
- Select Lighting licence to the nearest number of TOTAL channels required for both CASAMBI systems  
Note RGBW requires 4 or 5 channels (RGBW+dim or HSV+dim) to operate and TW (Tunable 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

<b>S4i-IB-COM-012</b>	-	COMMERCIAL IB Licence - supports up to 12 Integration Licences
<b>S4i-INT-XAPI-001</b>	-	3rd Party Control Integration API - S4i XAPI Licence
<b>S4i-INT-LIGHT-064</b>	-	Lighting Integration Licence - supports up to 64 channels
<b>S4i-INT-LIGHT-128</b>	-	Lighting Integration Licence - supports up to 128 channels
<b>S4i-INT-LIGHT-256</b>	-	Lighting Integration Licence - supports up to 256 channels
<b>S4i-INT-LIGHT-576</b>	-	Lighting Integration Licence - supports up to 576 channels
<b>S4i-INT-LIGHT-1280</b>	-	Lighting Integration Licence - supports up to 1280 channels
<b>S4i-INT-LIGHT-2560</b>	-	Lighting Integration Licence - supports up to 2560 channels

## CONTROL FUNCTIONS

- Lighting control functionality is dependant on;
  - a) Casambi internal capabilities
  - b) Gateway used to connect the IB
- Please refer to S4i Gateway Function Matrix datasheet for more details

## 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+, SSD: 256GB+ - Win10 IoT Enterprise
- CPU: X86\_64, 4+ Cores, RAM: 8GB+, SSD: 256GB+ - AlmaLinux OS® 8.5 software (64-bit version) or greater

### Required Gateways and Hardware

- S4i ETHERNET Enabled Casambi Gateway - supports up to 250 Casambi channels
- PoE Ethernet Data Communication Module
- Suitable POE Ethernet Switch

## CONDITIONS:

- S4i Integration Broker (IB) Solution is a software solution only
- 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
  - Dynalite hardware & networks
  - Ethernet hardware & networks