

AUTOMATION TECHNOLOGIES THAT WE TRUST

Selecting the automation system that's best for you.

C-BUS

DYNALITE

KNX

LIGHTING CONTROL

NOTES

On/Off (relay)				
240 Phase Dimming				
Dali Dimming				Certain KNX modules have "DALI8" which controls tune-able white colour rendering to help with circadian rhythm (dims and changes from warm white to daylight). Dynalite and KNX can configure DALI devices remotely.
0-10v Dimming				
DMX Dimming				Certain KNX modules provide 2 way DMX. Allowing DMX control panels to control KNX devices, e.g. a KNX relay to control house lights in a theatre

SHADE CONTROL

Interior Blinds/Curtains				
External Blinds/Louvers				
Louvered Roofs				
Position Control - Set to x%				
Automatic Heating/Cooling Support				
Safety Position In Rain/Wind				C-Bus and Dynalite can do this via integration of third party wind sensors into input modules and some additional programming - KNX allows us to select the wind speed at which the system reacts to wind protection
Auto Control With Sun Position				

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CEILING FANS

NOTES

Ceiling Fans (AC)				
Ceiling Fans (DC via 0-10v)				

METERING & SENSING

Motion Sensing (Indoor/Outdoor)				Certain KNX sensors are the smallest and most flush on the market. They are also available in full black, including the lens.
Brightness				
Temperature				KNX has a much larger product range in this area: UFH probes, tank sensors. Certain ceiling-mounted motion sensors also can read a room's temperature to help with HVAC.
Humidity Detection				Certain KNX motion sensors and wall-mounted thermostats have humidity detection built in. This helps with HVAC control or to automatically control extraction fans in bathrooms/laundry.
Weather				KNX has weather stations that help with external blind/louver protection (wind/rain), auto blinds on sun position, help with HVAC systems, irrigation systems (cancel schedules if it has rained or add watering if hot).
Energy Metering				KW + KW/h measurements, Monetary and CO ² emissions conversions, active energy usage. Energy meters can be used for monitoring as well as 'load shifting', so that high energy use items are used at smarter times.
Water				KNX provides: Tank sensors (can control levels of water tanks, pools etc.), Water detection sensors (flooding detection of plant rooms, kitchens, bathrooms etc.) & Water consumption meters.
Pool/Aquarium/Ponds				Detects pH and other factors and can control dosing of chemicals. Alerts sent on set thresholds.
Air Quality, Gas/CO ² /Humidity				CO ² concentration (can trigger ventilation) Dewpoint - prevents mould.
Irrigation Sensors				Controls irrigation systems based on real-time readings of the soil's temperature, humidity & moisture.

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HVAC

NOTES

Dedicated HVAC Control Hardware				KNX has an array of product to control AC split and VRV systems, under-floor heating manifolds, dedicated fan coil units and even Geothermal HVAC.
Thermostats				Certain KNX light switches can read the rooms temperature and have inbuilt thermostat control - allowing large thermostat wall controllers to be hidden.
Auto adjust HVAC on occupancy				Certain KNX switches and sensors have inbuilt presence detection that set the HVAC from "Comfort" to "Economy" - Economy widens the setpoints so a room stays within limits when the home is occupied. Comfort tightens the setpoints when presence in a room is detected.
Dedicated Room Ventilation Control				

SYSTEMS INTEGRATION (DIRECT)

IP/LAN				
BACNet				
ModBus				
RS232/485				
Radio Frequency (rf)				
Expandable Over IP				C-Bus requires a head-end server to achieve this, as well as an IP interface on each network - KNX just requires a KNX IP interface on each network.





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OTHER

NOTES

Direct Sonos Integration				KNX has Sonos modules that allow direct control over Sonos from KNX devices e.g. a wall switch (pause/play, skip/previous, trigger playlits, control volume, mute etc.)
Direct Voice Control				KNX has direct voice control modules that allow simultaneous integration of Apple Homekit, Amazon Alexa & Google Home. Call commands and query status of all KNX connected devices. C-Bus can have voice control via a third-party, paid, cloud subscription service.
Range of Switches	Classic - 30m mechanisms (fit any Clipsal or ZETR plate), Reflection (metal style), Saturn Glass, Saturn Zen - The Saturn series includes EDLT model with small inbuilt screen.	Classic, Revolution, Antumbra	Hundreds of brands with multiple models - low end options to premium options such as Basalte.	
Network Language	C-Bus	Dynet	KNX	C-Bus and Dynalite are manufacturer owned languages/protocols. KNX is an open worldwide standard. Products that go to market have to be approved by the KNX association to maintain quality and reliability.
Available Countries	60 to 70	60 to 70	172	
Error Correction/Reporting				

RYELEC
 AUTOMATION & ELECTRICAL SERVICES

LINKS

https://www.ivoryegg.com.au/essential_guides/connecting-knx-and-av

<https://www.knxtoday.com/2015/03/5641/trade-talk-why-knx-and-av-are-the-perfect-match-2.html>