





Building automation

Intelligent building control via network

Measuring, controlling, regulation automatically and independently



ALLNET follows the concept of intelligent control of the increasing complexity of building technology via network and internet. Intelligent building technology doesn't only offer more comfort, but also promotes the reduction of energy costs. Controlled centrally and accessible via network / internet, the ALLNET home automation products enable intelligent building control regardless of time and location.

The **ALLNET ALL4500/ALL5000** IP control center is a professional Ethernet sensormeter for variable usage scenarios in the professional home and industrial environment.

The main task of the IP control center ALL4500 / ALL5000 is perfect for the recognition and signalization of the ambient conditions, e.g. temperature, humidity, pressure, the activation of switching inputs via contacts or relays and so much more. This can take place manually, time-controlled or regardless of the recorded values.

Different scenarios like the control of light, jalousies, air conditioning and household appliances can be controlled by the ALL4500 / ALL 5000. From temperature acquisition and on demand heating of several rooms, control of garden irrigation, gas smell and water ingress alerting to automatic jalousies opening and closing, depending on daylight. There are no limits for your creative ideas.

You control everything from your PC, notebook or other mobile devices, e.g. smartphone or tablet, regardless of whether you're staying at the same building or on another continent. The ALL4500 / ALL5000 control units can be addressed and adjusted via unique IP addresses, by cable or wireless via Wifi. The determined values can be called up directly from the device via web browser or e-mailed, e.g. in case of exceedances or undershooting of preset limits. An integrated and open-source XML interface allows you to individually interrogate the database via internet with external applications.

To this, you can find several examples of use on page 15.

The ALL4500 / ALL5000 offer a linux based open source operation system. Therefore it offers enough space for own software developments and adjustments, suitable for your individual operation purpose.



The professional IP control center for you building



ALL4500/ ALL5000

- Network based home automation central
- Control, measure and manage via network
- Security and comfort gain
- 8 / 16 ports for measurement and control modules
- Narrowband-powerline-technology: Switching operation as well via 230V electricity grids (only ALL5000)
- High voltage relays (only ALL5000)
- Home automation, the future starts now!
- Integration of radio system, plugwise or EnOcean adapters



Product: Module ports and switching modules: Interfaces:

ALL4500/ ALL5000 IP Control Center ALL4500 8x RJ45

ALL5000 16x RJ45

ALL4500 3x RS232 1x RS485 1x USB 2.0 ALL5000 2x RS232 3x USB 2.0 external 1x USB 2.0 internal 4x Low voltage relay 4x 230V relay 4x A/D converter input 16bit

4x Contact input

1x temperature sensor onboard

	in temperature i
Management / control: Network Interface: Power input: Power Consumption: Housing: Dimension:	via web browser, open source XML 1x RJ45 10/100Mbps 100~240 VAC, 50/60 Hz, internal power supply <3 watt (without additional module) 19" metal case (1HU) Temperature operating: 5 ~ 40 °C Humidity operating: 10% ~ 85% (non-condensing) Temperature storage: -20 ~ 60 °C Humiditiy storage: 5% ~ 90% (non-condensing)
Mark: Dimension:	CE, RoHS 205 x 140 x 55 mm (Widht x Depth x Height)
Weight:	1265 grams (without package and accessories)
Package Content:	1x ALLNET ALL5000/ 1x ALLNET ALL4500

00 1x ALLNET ALL3006 Temperature sensor 1 Manual Power cable





Individually and flexibly operational

ALL3500 (PoE)/ ALL3505

The ALL3500 control center combines high functionality in a compact and cost-efficient design. That saves space and costs, but still provides impressive functionality. There are 4 relays, 4 senor ports and 4 contact inputs available. Thereby, the ALL3500 is extremely versatile.





The cost-efficient entry into professional home automation.

The ALL3500 control center offers a cost-saving and solid platform for the implementation of measured data based control solutions. Because of the engaged Linux open source operation system, the control center can be adapted to the desired scenarios of use and is therefore perfectly suitable for various applications.

The ALL3500 central is able to record and reprocess different states of environment, e.g. temperature, humidity or pressure or the activation of switching inputs via contacts or relays. Depending on the configuration, this can happen manually, timecontrolled or automatically - based on the acquired values. To achieve maximum functionality, you can use the extensive portfolio of ALLNET sensors (pages 8 and 9) without any problems.

The ALL3500 control center can be configured and controlled locationindependently via integrated webserver, which that you can display, evaluate and archive the measured values of the connected sensors and relays. The integrated, open-source XML interface enables additionally an easy integration into complex installations or into already engaged control software. Thanks to the 10/100 Mbit LAN connection and 300Mbit Wifi, the installation location of the ALL3500 is flexible and independent of the existing networking infrastructure. If you decide to use wireless operation, the two antennas ensure wide reach and trouble-free data transmission.

In spite of its compact design, the product comes with a large selection of functions, relating to the subjects of measuring, controlling and regulating. Because of the four I2C bus sensors, four 250V 8A relays and four contact inputs, the center can be deployed for switching consumers, the evaluation of sensors or for the connection of buttons.

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Additionally, a console port and a USB 2.0 port stands ready to connect radio technology, e.g. zigbee or EnOcean products.

The architecture of the ALL3500 enables a multi-layered and reliable application of critical control points or alarm scenarios depending on the switching of alarm transducers. The control center can also be used for the supervision of air humidity, gas smell and water ingress. On request, devices that are connected to the actors can be switched, when a configured limit falls below the minimum or above the maximum to avoid critical situations.



Product: Interfaces: Network Interface: Switch relay: Contact Input: Wireless LAN:

Safety: Supported Standards:

Management / control: Other interfaces:

Power supply: Power consumption:

Housing:

Environment:

Mark:

Dimension: Weight:

Package content:

ALL3500 (PoE) Control Center/ ALL3505 IP Homeautomation Appliance HUT 4x RJ45 sensor modules 8x RJ45 sensor modules 1x RJ45 10/100Mbps 4x potential-free (á 8A) 4x for push buttons, switches, etc. Ralink RT3352 Chipset 2,4 GHz Wireless N WEP 64/128bit, WPA, WPA2 **IEEE 802.3** IEEE 802.3u IEEE 802.3af/at (only ALL3500PoE) IEEE 802.11b/g/n via web browser, open source XML 1x USB 2.0 1x Console 100~240 VAC, 50/60 Hz, extern power supply/ (PoE) <5 watt maximum

Metal housing

Temperature operating: $0 \sim 40$ °C Humidity operating: $10\% \sim 85\%$ (non-condensing) Temperature storage: $-20 \sim 60$ °C Humidity storage: $5\% \sim 90\%$ (non-condensing)

CE, RoHS

220,4 x 80 x 30 mm106 x 90 x 60 mm (Widht x Depth x Height)400 grams300 grams(device incl. WLAN antenna and ALL3006 sensor)

ALLNET ALL3500 (PoE)/ ALLNET ALL3505 ALLNET ALL3006 temperature sensor WLAN Antenna external power supply (only ALL3500 & ALL3500PoE) manual



Use existing cable networks for sensor connection.



ALL3418v2 The beginner center

The ALLNET ALL3418v2 IP thermometer is a flexible and cost-efficient solution for temperature recording via network.



"Save money and energy"

With the optional available sensors, it is possible to extend the ALL3418v2 you can extends the ALL348v2 by a high quantity of actors or sensors. For the connection of the sensors, all of ALLNET's control centers use a copper cable with four or eight copper cores (I2C-bus).Here you will only need a common structured copper cabling. The maximum cable length between the central unit and the sensors is 100 meters. Since all of the sensor modules are supplied with voltage via the central unit, you will not need a separate power source for the individual modules.



The ALLNET ALL3418v2 IP singleport central is a compact and cheap solution for the beginning solution for the registration of temperature via network. Because of the compact design, it's possible to install it everywhere – even at place that are difficult to access. The power supply takes places via 12V/1A power supply. The rugged aluminium case offers you full safety against mechanical damage.

The ALL3418v2 IP singelport central is accessible over IP address in the local network or via internet and can be stacked with Wifi or cable. The determined values can be called up directly from the device via web browser or emailed, e.g. in case of exceedances or undershooting of preset limits.





- Compact construction
- Temperature monitoring via network
- Integrated Wifi with 150Mbit or 10/100Mbit network
- 1 port for a random sensor

Element: Product: Interfaces:

Network Interface:

Power supply:

Management / control:

Power consumption: Housing: Environment:

Mark: Dimension: Weight:

Package content:

type ALL3418v2 IP Single Port Central 1x RJ45 for sensors 1 x RJ45 10/100Mbps 150Mbit Wireless Module 1T1R

100~240 VAC, 50/60 Hz, external power supply 12V 1A

via a web browser, open source XML

<3 watt maximum Aluminiumgehäuse Operating temperature: 0 ~ 40 °C Operating humidity: 10% ~ 85% (non-condensing) Storage temperature: -20 ~ 70 °C Storage humidity: 5% ~ 90% (non-condensing)

CE, RoHS 77x53x20 mm (Length x width x height) 125 grams grams (without package and accessories)

ALLNET ALL3418v2 ALLNET ALL3006 temperature sensor WLAN antenna External power supply Quick installation guide

temperature

air humidity/ temperature



air pressure/ air humidity/ temperature





Optional sensors for the ALL3500/ ALL4500/ ALL5000 series

ArtNr.	Description	ALL3418V2	ALL3500	(ALL4000V2)	ALL4001	ALL4500	ALL5000	ALL3692	other
		ArtNr. 95629	ArtNr. 98686	ArtNr. 86173 EOL	ArtNr. 59976	ArtNr. 84148	ArtNr. 81174	ArtNr. 101241	Combination
28196	ALL3002 1x relay output	х	х	х	х	х	х	х	
28197	ALL3003 1x output optocoupler	х	х	х	х	х	х	х	
27166	ALL3006 Temp sensor indoor	х	х	х	х	х	х	x	ALL4076
26780	ALL3015 Temp sensor waterproof	х	х	х	х	х	х	х	
27359	ALL3018 Temp/ humidity sensor	х	х	х	х	х	х	x	ALL4076
33502	ALL3021 Voltmeter VDC	х	х	х	х	х	х	х	
33501	ALL3024 Mains voltage monitor	х	х	х	х	х	х	х	
27904	ALL3025 Contact counter	х	х	х	х	х	х	х	
76814	ALL3032 Brightness sensor	х	х	х	х	х	х	х	
34417	ALL3036 Liquid level sensor vertical	х	х	х	х	х	х	х	
34418	ALL3037 Liquid level sensor horizontal	х	х	х	х	х	х	х	
36788	ALL3051 PIR motion detector	х	х	х	х	х	х	х	
61957	ALL3054 Shocksensor	х	х	х	х	х	х	х	
61956	ALL4003 HUT/ portextender 3 port				х				
60987	ALL4006 HUT/ temp Sensor	х	х	х	х	х	х	х	
59978	ALL4012 Power supply f. 4001/4027				х				ALL4027
60988	ALL4018 HUT/ temp/ humidity sensor	х	х	x	х	х	х	х	
61959	ALL4020 HUT/ 1x relay switching outp	ut x	х	x	х	х	х	х	
64681	ALL4022 HUT/ VDC voltmeter			x	х				
72556	ALL4023 HUT/ 3xVDC voltmeter	х	х	x	х	х	х	х	
60991	ALL4024 HUT/ voltmeter 1phase	х	х	x	х	х	х	х	
61953	ALL4025 HUT/ Contact counter S0 bus	х	х	x	х	х	х	х	



ArtNr.	Description	ALL3418V2	ALL3500	(ALL4000V2)	ALL4001	ALL4500	ALL5000	ALL3692	other
		ArtNr. 95629	ArtNr. 98686	ArtNr. 86173 EOL	ArtNr. 59976	ArtNr. 84148	ArtNr. 81174	ArtNr. 101241	Combination
59502	ALL4027 HUT/ 8 port 250V/ 6A relay	х	х	x	х	х	х	х	
60990	ALL4029 HUT/ Temp/ humidity/ pressure	sensor x	х	x	х	х	х	х	
81864	ALL4033 HUT/ AC voltmeter	х	х	x	х	х	х	х	
58455	ALL4039 ELV radio module			x					
91666	ALL4504 Port multiplexer 8x	х	х			х	х	х	
88283	ALL4506 Temp sensor	х	х	x	х	х	х	х	ALL4076
88284	ALL4520 Relay output1x16A	х	х			х	х	х	
88282	ALL4524 Mains voltage monitor	х	х	х	х	х	х	х	
89722	ALL4526 1xSwitching input	х	х	х	х	х	х	х	
88281	ALL4529 Temp/ humidity/ pressure ser	isor x	х			х	х	х	ALL4076
88285	ALL4532 Brightness sensor analog	х	х			х	х	х	
98820	ALL4404 Port multiplexer 8x	х	х			х	х	х	
98821	ALL4406 Temp sensor	х	х	х	х	х	х	х	ALL4076
102436	ALL4418 Temp/ humidity Sensor	х	х	x	х	х	х	х	ALL4076
98824	ALL4425 Contact counter S0 Bus	х	х	х	х	х	х	х	
98825	ALL4427 4 port relay 250V/10A	х	х	S	S	х	х	х	
98828	ALL4429 Temp/ humidity/ pressure ser	isor x	х			х	х	х	ALL4076
98831	ALL4432 Brightness sensor analog	х	х			х	х	х	
98836	ALL4442 4x contact input	х	х	S	S	х	х	х	
98838	ALL4444 4x Mains voltage monitor	х	х	х	х	х	х	х	
98840	ALL4452 PIR motion detector	х	х	х	х	х	х	х	
102435	ALL4025 HUT/ contact counter S0 Bus	х	х			х	х	х	
115545	ALL4408 PT100-Interface	х	х			х	х	х	
115537	ALL4409 PT1000-Interface	х	х			х	х	х	

S: only with specific configuration

Find more information about the sensors: www.allnet.de/en



Measure your power consumption fast and reliable

ALL3690 and ALL3691

To save electricity sustainably, the concrete consumption must be known. ALLNET's powermeters ALL3690 and ALL3691 help to identify peak loads and main factors of your power consumption, which can be minimized that way. The powermeter allows direct access to the three phases in the electricity line. The matching induction clips deliver the current consumption data, so that an intervention into the cabling is not necessary: That improves safety and comfort.

The numerous network functions enable an individual processing or specific evaluation and archiving of the measured data. The graphical editing and of the measured data as well as the network wide access make the powermeter series an innovative analysis tool for the displaying of the power consumption.



Product: Network:	ALL3690 Powermeter PM1 / ALL3691 Powermeter PM2 10/100Mbit interface
Interface:	ALL3690: 2x USB 2.0, 1x S0 interface
Management / control:	ALL3691: 2x S0 interface, 2x connections for 2x induction clamp, 4x D0
Operating Systems:	via a web browser, open source XML all network-compatible operating systems
Voltage range:	200 - 250 volts
Housing:	Aluminum housing
Environment:	Temperature operating: 5 ~ 40 °C Humidity operating: 10% ~ 85% (non-condensing) Temperature storage: -20 ~ 60 °C
	Humidity storage: 5% ~ 90% (non-condensing)
Dimension: Weight:	150 x 140 x 55 mm (Length x Width x Height) 1265 grams grams (without package and accessories)
Package content:	1x ALLNET ALL3690/ ALL3691 3x Inductional clamps with 0.5 m connection cable up to max. 50 amp 1x Power supply 1x Manual







The all-rounder: measure power consumption and record sensors

ALL3692

The ALL3692 power meter offers another great advantage. Besides the possibility of parallel measuring up to four different D0 power meters, the device also delivers the data of the connected sensors. Therefore, it is possible to measure the brightness and temperature e.g. to supervise a photovoltaic system. The sensors are able to deliver valuable information for the efficency and supervision of the installation. When the brightness sensor signalises optimal conditions, but the performance values of the system do not reflect these, it's easy to determine defects and impurities. That does not only enable an increase in safety, but also a fast reaction to malfunctions or the exceedances of pre-defined limits.

Because of the integrated magnet, the D0 optical stylus can be placed easily in the designated area of the compatible power meter. For a better overview the functionality is signalised by a LED on the frontside of the sensor. Since the installation can be handled without any technical knowledge and without the engagement into the buildings wiring, there is no need for an electrician in terms of the commissioning. Furthermore, the connection of the gateway occurs flexibly, because the ALL3692 can be connected by either 10/100 Mbit Lan or wirelessly by a 300 Mbit Wireless N module.

ALL3692 is compatible to the following digital D0 electric meters:

Producer	Туре	Description	reference	Supply
NZR	EHZ	Three-phase meter	x	-
Easymeter	Q3d	Three-phase meter	х	-
Voltcraft	VSM-105	Three-phase, two-way counter	х	х
EMH	ED100L	Phase meter	-	1-phase
EMH	ED300L	Three-phase meter	х	x
EMH	EHZ	Three-phase, two-way counter	х	х
Hager	EHZ363ZA	Bidirectional counter	х	х
Hager	EHZ363LA	Three-phase delivery narrator	-	х
Hager	EHZ363WA	Three-phase meter	х	-

Status february 2015, more electric meters following

Compatible sensors and actors:



D0 electric meter with optical stylus ALL3688 D0



ALL3688

ALL3073WLAN/ ALL3075v3 Switchable network sockets

Our network power strips enable the possibility to comfortably switch electronic devices on and off via network. Additionally, server or PCs can be rebooted from afar. In conjunction with our control centers, it's possible to program complex control scenarios dependent on both temperature and humidity.

- Enables the switching of the connected consumer device (up to 8A) by an integrated webserver
- The control occurs time controlled, consumption controlled, programmed or manually
- Recording of voltage and power consumption
- 10/100 Mbit RJ45 network connection
- German safety plug/ socket
- For 220 230 V AC voltage

Product: Network: Network Interface: Interface:

Protocols:

Management / control: Operating Systems: Voltage range: Switching current:

Housing:

Environment:

Dimension: Weight: ALL3073WLAN/ ALL3075v3 Network socket 10BaseT/100BaseTX RJ45 10/100Mbit Fast-Ethernet IEEE 802.11b/g/n HTTP/HTTPS TCP/IP via Web browser, XML all op. systems allowing network operations 200 - 250 volts max. 8 Amp / 16 A (ALL3073WLAN/ ALL3075v3)

plastic housing with integrated socket

Operating temperature: 0 \sim 40 ° C Operating Humidity: 10% \sim 85% (non-condensing) Storage temperature: -20 \sim 60 ° C Storage Humidity: 5% \sim 90% (non-condensing)

125 x 68 x 48 mm (Height x width x depth) 200 grams (without package and accessories)







ALL4075 The four port relais center



- Intelligent 4-plugs relay box for switching load up to 10 Ampere
- Control via Web browser (no software required)
- Access via 100BaseTX Ethernet and WLAN 802.11b/g/n
- USB-interface for extensions such as PlugWise
- USB-interface for extensions such as PlugWise
- Integration of radio systems, Plugwise or EnOcean adapters



Product: Connectors:

Wireless LAN: Security: Wireless LAN Chipset:

Compatible Standards:

Protocols:

Management/Control: Operating System:

Voltage Range: Switching Current:

Housing:

Environment:

ALL4075 Netzwerk relays 4x 220V/10A

4x Relay contacts (Screw terminals) 1x RJ45 LAN 10/100 Mbit/s 1x USB 2.0 Host 1x R-SMA (WLAN) 2,4 GHz Wireless N, up to 150 Mbps 1T1R WEP,WPA,WPA2 Ralink RT3352

IEEE 802.3 IEEE 802.3u IEEE 802.11b/g/n HTTP/HTTPS TCP/IP via Web browser, XML all Op. Systems supporting network

250 volts max. 4x 10 Amp max.

Aluminum housing with hole for wall mounting

Operating temperature: $0 \sim 40$ ° C Operating humidity: $10\% \sim 85\%$ (non-condensing) Storage temperature: $-20 \sim 60$ ° C Storage humidity: $5\% \sim 90\%$ (non-condensing)

140 x 80 x 55 mm (Length x width x height)

610 grams (without package and accessories)

Dimension: Weight:





ALL4076 Six socket strip



- The ALL4076 web socket strip with six shockproof socket for switching of consumer devices up to 10 A
- 10/100 Mbit rJ45 network access and 150 Mbit Wifi
- German safety plug/ socket
- Inclusive 19" installation kit
- 200 250 V Wechselspannung
- Switching via web, time control, temperature, humidity, USB master/slave or manually
- Control via web-interface, opensource XML, time-control, USB master/slave or manually with button
- integration of radio systems, Plugwise or EnOcean adapters





Product:

Connectors:

Wireless LAN: Security: Wireless LAN Chipset: Supported Standards:

Protocols:

Management/Control: Operating System: Voltage Range:

Switching Current: Housing: Environment:

Dimension: Weight:

Delivery:

ALL4076 Netzwerk Web-Steckdosenleiste 220V/10A

6x Safety Sockets 1x RJ45 LAN 10/100 Mbit/s 1x R-SMA (WLAN) 1x USB 2.0 Host 1x USB-B Connector (PowerON-Sensor) 1x RJ45 Sensor connector (Temp./Humidity)

2,4 GHz Wireless N, up to 150 Mbps WEP,WPA,WPA2 Ralink RT3352 IEEE 802.3 IEEE 802.3u IEEE 802.11b/g/n HTTP/HTTPS TCP/IP via Web browser, XML all network compatible operating system 250 volts max.

10 Amp max. Aluminium Profile Housing Operating temperature: 0 ~ 40 ° C Operating Humidity: 10% ~ 85% (non-condensing) Storage temperature: -20 ~ 60 ° C Storage Humidity: 5% ~ 90% (non-condensing)

425 x 140 x 55 (60) mm (Length x width x height) 2470 grams (without package and accessories)

- 1 ALL4076
- 1 Power supply
- 1 Manual
- 1 WLAN Antenna



ALL3088 IP Symcon-Basic ALL3089 IP Symcon-Professional CasaRemote HD iOS APP

The management software

IP-Symcon is the innovative center of your entire building automation!

It combines the various bus and radio systems as well as audio and video components into one software interface. Control climate, lighting scenarios, or shading via PC and Smartphone. Keep yourself informed about what is happening at your home and keep track of your home's energy consumption.

Example scenarios:

👔 IP-Symcon 🥵 Home 🌾	Weather Friday, 10. June 2011	👔 IP-Symcon 🕸 Home 🏷 Weather Friday, 10. June 2011
🕆 į Dates 🖂 Communicati	on 👔 Home 🗯 Michael ሎ Energy	Ŷ
Ambience lighting		So Performance (server)
	73% 22% 52%	
Motion detection	e	1100- 1110- 1110-
🗜 Status	active locked	1120- 1120- 1100- 1100-
Ceiling lighting		2000- 2000- Will all a lar malleren water with the Providence of the Astro-
() Left	Off On	1010 - 1000 - 10
() Middle	Off On	102.0 - 1100.0 - 3100.
() Right	Off On	
all Brightness	36 %	W Verbrauch Sa 30 Apr 2011 00:00:00 CEST - Sa 30 Apr 2011 23:59:59 CEST
N #		Day 🔾 🏳 now show extrema dynamic scaling
☐ IP-Symcon < I Home Solar collector Collector	Michael 🐓 Energy 🛋 Weather ▷ 0051.	SMARTHOME
(¹) Pump	m ho	
Store (upstairs)	52,5 °C	
Store (downstairs)	35.9 °C 🚧	20,000
Consumption		
Consumption	4.374.36 m ¹ Jun	
Consumption	4.374,98 m ¹ 교객 190.334 liter 교객	
Consumption Gas Water Power	4.374.36 m ³ 문서 190.334 liter 문서 95.821.88 KWn 문서	
Consumption Gas Water Prover Performance (total)	4 374 30 m² Ex 190 334 liter Ex 96 82 1,80 VM Ex 96 80 1 90 VF Ex	
Consumption Cas Water Power Performance (total) Cas Performance (server)	4.374,30 m ² AM 100.354 Kmr AM 955.201,00 kmh AM 546,80 M AM 101,6 W AM	
Consumption Sas Water Power Performance (untal) Performance (untal) Performance (untal)	4.374,36 m ² 44 190.334 feer 44 955.821,8034 feer 44 948.88 W 44 101,8 W 44	
Consumption Case Valuer Professional (stall) Case Performance (server)	4, 374, 38 m ² (24) 190 334 liter (24) 96.821, 00 k/h (24) 540,8 W (24) 101,6 W (24)	Cround flour Lupper flour Tuchnics Websets

Additionally in the professional version:

- 1000 useful variables
- Web visualization "WebFront"
- Own form-based windows visualization (dashboard)



More informations: www.ip-symcon.de/en/product



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