Weather sensor module WSM-01E

General

The weather sensor module has been developed specifically for the weather sensors which are obtainable in the ISYGLT product range. Wind speed sensor WG-C, wind direction sensor WRG-C and the precipitation sensor or our combi sensor WG-NW-KOMBI can be connected to this module. By paramerisation of the module in the ProgrammDesigner a automatic correct converting and allocation of the weather data in the master module is done. An expensively „out programming" of the middled wind directions is omitted. You only have to indicate the used sensor, then adjust the module by parameterisation and the data are present correctly. By using of the combi sensor the light values East, South and West will be read in automatically. The module ascertains additional the light value North by interpolation. In doing so the weather data of all the 4 light values are available on the Nothern half ball (>25° North). Please see that the sensors have an effective range of 100 lx up to 102300 lx. Therefore this effective range is unqualified as a night switch. But for blind control this values are exactly right.

Inputs / Outputs
• 5 analogue inputs 0-10V
• 6 + 2 digital inputs, each with own „C" potential connection

Function displays
• 1 red LED indicates the operating voltage
• 1 yellow LED signalise by flashing the communication with the master module via the subnet

Connections
• 1 connection for the subnet (BUS A and B, RS-485)
• 2 connection for the operating voltage (Ub, 0V)
• 5 analogue inputs
• 8 digital inputs

Design
• Encapsulated in a plastic black cover for installation in foreign devices

Technical data

| Type	WSM-01E
Art.No.	80086055
Operating voltage	12-30V DC
Current consumption	max. 60mA
Current of analogue inputs	5 analogue inputs, with own GND 0-10V, 8Bit resolution
Digital inputs	12-30V 5mA via optical coupler (4,7kOhm)
Subnet (RS-485)	max. 5,6V limited by Z-diodes
Dimensions	LxBxH 70x50x30mm
Weight	100g
Connection	Plug screw terminals max. 0,75qmm
Operating temperature	-10...+50°C

Technical data

| Type	WSM-01E
Storage temperature	-25...+70°C
Humidity	0...85 % r.F. non condensing
Protection grade	IP20
Immunity	Conform EN61000-6-1, EN61000-6-2
CE sign	Yes

Terminal assignment

Terminal	Designation
$\cong$ Ub	Operating voltage
0V	Operating voltage
A	Subnet (BUS A, RS-485)
B	Subnet (BUS B, RS-485)

Terminal	Designation
E1	Digital input 1
E2	Digital input 2
E3	Digital input 3
E4	Digital input 4
E5	Digital input 5
E6	Digital input 6
C.1	Cross potential for E1 to E6
E7	Digital input 7
E8	Digital input 8
C.2	Cross potential for E7 and E8
GND	GND for analogue inputs
AE1	Analogue input 1
AE2	Analogue input 2
AE3	Analogue input 3
AE4	Analogue input 4
AE5	Analogue input 5

View
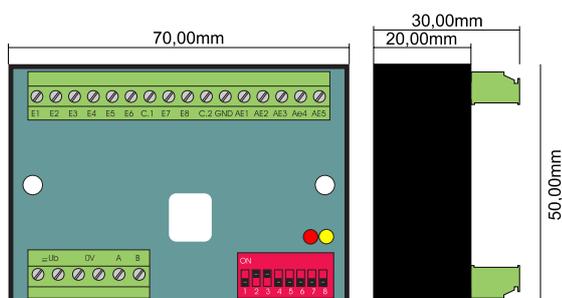
Wiring diagram
For weather combi sensor

Wetterkombisensor

WG-NW-KOMBI
Art.Nr.: 80086030

		Regen		Helligkeit West Süd Ost			Wind					
1 +24V	2 0V	3	4 GND	5	6	7	8	9	10	11	12	PE
ws	br	gn	ge	gr	og	bl	rt	sw	vt	ws/br	sw/br	gn/ge

von ISYGLT-SUBNET

-X-BUS

+U +U 0V 0V A B

+Ub 0V A B

Ub 0V BUS A BUS B

E1 E2 E3 E4 E5 E6 C.1 E7 E8 C.2

1 2 3 4 5 6 7 8
Adresse

ISYGLT WSM-01 E
Art.-Nr.: 80086055

GND AE1 AE2 AE3 AE4 AE5

Windspeed Ost Süd West Regen
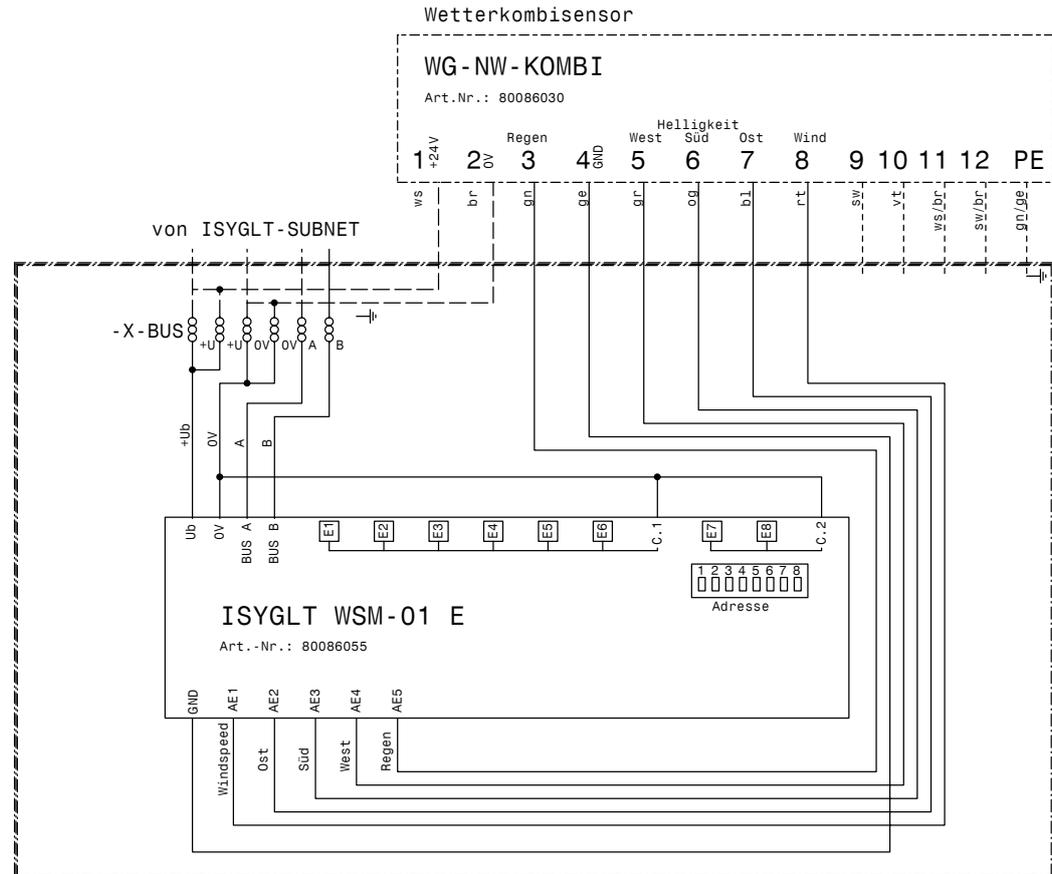
Wiring diagram

For wind speed sensor and precipitation sensor

Niederschlagswächter | Windgeschwindigkeitgeber

NW-R
Art.Nr.: 80086020

R   W   A   +   -

Hzg.

WG-C
Art.Nr.: 80086010

1 +24V   2 0V   3 0-10V   4 GND   5 Hzg. 24V   6 Hzg. 24V

ws   br   gn   ge   gr   rs

von ISYGLT-SUBNET

-X-BUS

+U +U 0V 0V A B PE

+Ub   0V   A   B

Normalregen   Starkregen

Ub   0V   BUS A   BUS B   E1 E2 E3 E4 E5 E6 C.1   E7 E8 C.2

1 2 3 4 5 6 7 8
Adresse

ISYGLT WSM-01 E

Art.-Nr.: 80086055

GND   AE1   AE2   AE3   AE4   AE5

ISYGLT®
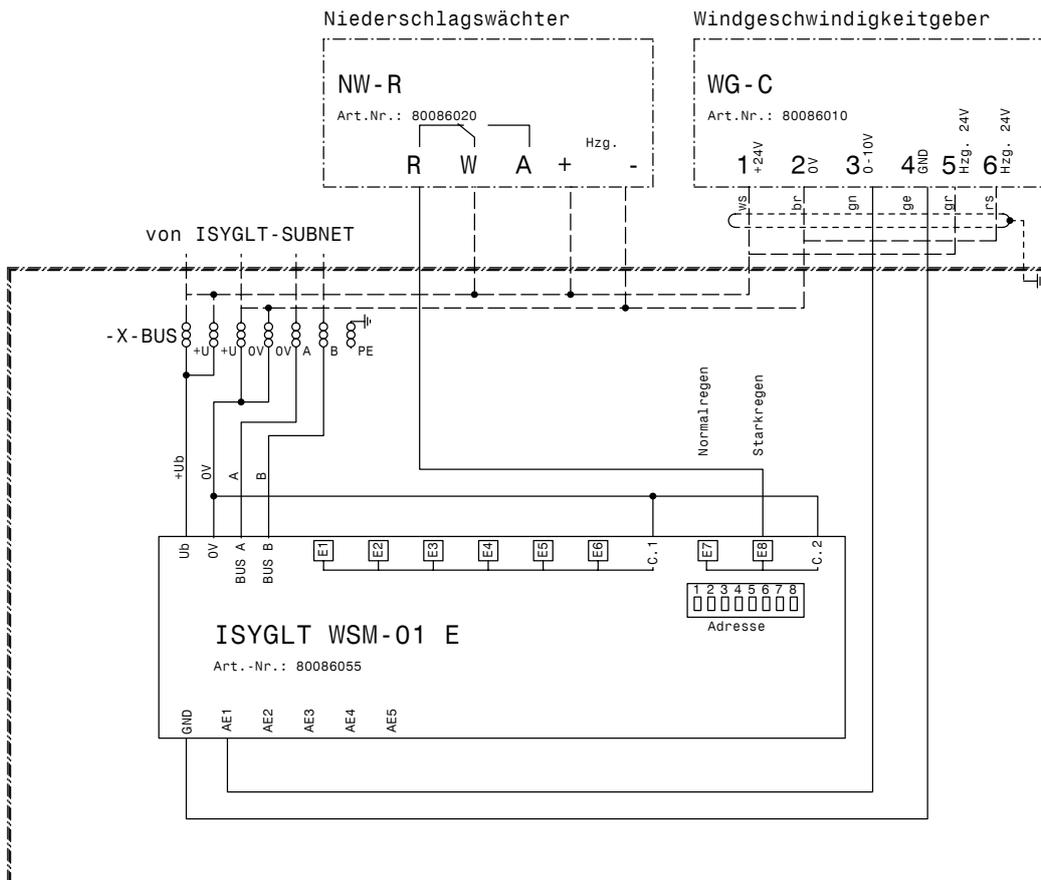
Wiring diagram

For wind speed sensor, wind direction sensor and precipitation sensor