GREENHOUSE

WHY?
Peace of Mind
Lowered Expenses
Higher Yields

WHAT?
Advanced Irrigation
& Climate
Controllers

HOW?
Automated Control
over Farms and
Greenhouses

Munters
Your Perfect Climate

Green Field

Green Field provides overall control and management over industrial farm irrigation systems, maximizing both the yields and quality of your harvests.
Green Field's large range of functionality provides farm managers with the tools needed to automate irrigation and fertigation processes.

• Precision control improves fertilizer availability

• Modular system that can be custom designed for your greenhouse or farm

• Software enables dynamic irrigation programs and exact dosing programs

• Supports a large number of analog input/output devices, digital/pulse inputs, relay dry contacts, and DC latch outputs

• Up to 64 outputs or 256 with expansion boxes

Configurator PN	Munters Description
960-03-00001	GREEN FIELD -GRH-EN-MUR-230V-DO16-8DI-11AI
960-03-00002	GREEN FIELD -GRH-EN-MUR-230V-DO16-8DI-11AI-DD
960-03-00003	GREEN FIELD -GRH-EN-MUR-115V-DO16-8DI-11AI
960-03-00004	GREEN FIELD -GRH-EN-MUR-115V-DO16-8DI-11AI-DD
960-03-00005	GREEN FIELD -GRH-CN-MUR-230V-DO16-8DI-11AI
960-03-00006	GREEN FIELD -GRH-CN-MUR-115V-DO16-8DI-11AI

Green Field Eco

Green Field Eco Irrigation Controller provides overall control and management over small to medium size irrigation systems, maximizing both the yields and quality of your harvests.
A cost-effective solution, Green Field ECO's large range of functionality provides farm managers with the tools needed to automate the irrigation and fertigation processes.

- Up to 15 outputs

- Irrigation according to time or external conditions

- Advanced EC/pH control and monitoring

- Software enables configuring dynamic irrigation and dosing programs

- Hardware package supports analog and digital inputs

- Program supports filter flushing, cooling, and misting programs

Configurator PN	Munters Description
960-04-00001	GREEN FIELD ECO -GRH-EN-MUR-230V-DO15-6DI-5AI
960-04-00002	GREEN FIELD ECO -GRH-EN-MUR-230V-DO15-6DI-5AI-DD
960-04-00003	GREEN FIELD ECO -GRH-EN-MUR-115V-DO15-6DI-5AI
960-04-00004	GREEN FIELD ECO -GRH-EN-MUR-115V-DO15-6DI-5AI-DD
960-04-00005	GREEN FIELD ECO -GRH-CN-MUR-230V-DO15-6DI-5AI
960-04-00006	GREEN FIELD ECO -GRH-CN-MUR-115V-DO15-6DI-5AI

Green Climate

The Green Climate Controller is a multifunctional greenhouse controller covering diverse climatic conditions. The cost-effective controller is suitable for any climate-controlled greenhouse.

- Comprehensive climate control system for industrial greenhouses
- Control over ventilation, shading, heating, misting, fans, cool pads, air circulation, CO2 levels, lighting
- Each controller supports up to four climate zones; a network can contain up to 50 zones
- Software includes crop protection process
- Weather station data is shared with all network controllers

Configurator PN	Munters Description
960-01-00001	GREEN CLIMATE -GRH-EN-MUR-230V-DO16-8DI-11AI-1Z
960-01-00002	GREEN CLIMATE -GRH-EN-MUR-230V-DO16-8DI-11AI-1Z-DD
960-01-00003	GREEN CLIMATE -GRH-EN-MUR-115V-DO16-8DI-11AI-1Z
960-01-00004	GREEN CLIMATE -GRH-EN-MUR-115V-DO16-8DI-11AI-1Z-DD
960-01-00005	GREEN CLIMATE -GRH-EN-MUR-230V-DO16-8DI-11AI-2Z
960-01-00006	GREEN CLIMATE -GRH-EN-MUR-230V-DO16-8DI-11AI-2Z-DD
960-01-00007	GREEN CLIMATE -GRH-EN-MUR-115V-DO16-8DI-11AI-2Z
960-01-00008	GREEN CLIMATE -GRH-EN-MUR-115V-DO16-8DI-11AI-2Z-DD
960-01-00009	GREEN CLIMATE -GRH-EN-MUR-230V-DO16-8DI-11AI-3Z
960-01-00010	GREEN CLIMATE -GRH-EN-MUR-230V-DO16-8DI-11AI-3Z-DD
960-01-00011	GREEN CLIMATE -GRH-EN-MUR-115V-DO16-8DI-11AI-3Z
960-01-00012	GREEN CLIMATE -GRH-EN-MUR-115V-DO16-8DI-11AI-3Z-DD
960-01-00013	GREEN CLIMATE -GRH-EN-MUR-230V-DO16-8DI-11AI-4Z
960-01-00014	GREEN CLIMATE -GRH-EN-MUR-230V-DO16-8DI-11AI-4Z-DD
960-01-00015	GREEN CLIMATE -GRH-EN-MUR-115V-DO16-8DI-11AI-4Z
960-01-00016	GREEN CLIMATE -GRH-EN-MUR-115V-DO16-8DI-11AI-4Z-DD

Green JET

Green JET is a fully configurable, cost-effective fertilizer/acid dosing unit system that precisely and accurately injects fertilizers according to field/plant requirements.
Requiring minimal capital investment and operating in any site conditions, Green JET optimizes the main irrigation lines' available water flow rate and pressure to ensure maximum efficiency.

Montres Fertilizer injectors perform real-time monitoring and control, while providing the best possible plant nutrition under any growing conditions. These units deliver the most accurate fertigation possible by:
- controlling the amount of fertilizer relative to the amount of water
- simultaneously measuring and adjusting the EC PH values to the exact level the plant requires for optimal growth

This technology is backed up by vast technical knowledge gained through decades of experience in the agriculture industry

- Flexible/modular fertigation system
- Suitable for soil and soilless media crops
- Minimal capital investment
- Reduced water, fertilizer and energy consumption
- Very high level of EC and pH control
- Nearly maintenance-free Venturi operations – No moving parts

Standard Features
- Controller: Green Field or Green Field Eco (refer to the controllers data sheets for technical details).
- Available in 50/60 Hz, three or single-phase power supply.
- EC/pH Control Single or double measurement.
- Irrigation Flow Rate 5 – 600 m³/hour (22 - 2700 GPM).
- System Pressure 2.0– 5.0 bar (29 – 73 PSI).Higher pressure is available via special order.

* System order depends on the required configuration. Please contact customer service.

Fertilizer and Acid Dosing Channel Range

Type	Venturi Flow Rate	Dosing Valve	Optional - Fertilizer Meter
Electric	50-600 l/h	FIP S-12	"½ ARAD KD ½" or ARAD SF
	600-1,000l/h	FIP S-22	"¾ ARAD PB
Hydraulic	50-600l/h	Amiad Normally close + Baccara solenoid	"½ ARAD KD ½"or ARAD SF
	600-1,000l/h	Amiad Normally close + Baccara solenoid	"¾ ARAD PB
Manual	50-600l/h	Without	"½ ARAD KD ½" or ARAD SF
	600-1,000l/h	Without	"¾ ARAD PB

Green Net

Green Net is communication and management PC software that can be connected to our entire line of controllers (irrigation and climate).
This software supports extensive data collection and displays them in tables or color graphs.

- User friendly GUI

- Enables remote control over product configuration and management

- Provides analysis of each controller's performance

Green EC PH

This transmitter is designed to receive a signal from the EC and pH sensors that measure the quality of the measured water and translates this signal into a 4 - 20 mA output that can be connected to the Munters irrigation controllers, as well as to any other third party controller.

- Comes in plastic box (single unit) or metal box (single or double unit)
- Accurate EC data increases yields.
- pH measurement prevents nutrient deficiencies or toxicity

Configurator PN	Munters Description
960-05-00001	GREEN EC-PH -GRH-EN-MUR
960-05-00002	GREEN EC-PH -GRH-EN-MUR-MT
960-05-00003	GREEN EC-PH -GRH-EN-MUR-D-MT

Configurator PN	Munters Description
960-99-00043	EC ELECTRODE PT100 12 MM

Configurator PN	Munters Description
960-99-00044	PH GLASS 12 MM BNC CONNECTOR

Weather Station

Weather station provides data on:

- Temperature
- Humidity
- Wind speed
- Wind direction
- Rain detection
- Radiation

Configurator PN	Munters Description
960-07-00001	GREEN W.STATION-WD-WS-SR-MUR-230V
960-07-00002	GREEN W.STATION-WD-WS-SR-MUR-115V

CO2 Sensor

- Measures CO2 in a greenhouse
- Range: 0 - 5000 PPM
- Accurate to +/- 3%
- Data is transmitted using a 4 - 20 mA output
- CO2 treatment (increase in ventilation, etc) begins when CO2 levels rises above user defined set point

Configurator PN	Munters Description
960-14-10007	CO2-GRH-EN-MUR

Green Box T+H

- Unit includes a temperature and humidity sensor
- Humidity sensor measures relative humidity from 0 – 100%; high humidity initiates dehumidification process
- Easy to maintain and repair in case of malfunction
- Temperature sensor provides data for multiple, important controller functions including heating and cooling processes
- Operates from -30° to +50° C

Configurator PN	Munters Description
960-08-00001	GREEN BOX -GRH-EN-MUR-T
960-08-00002	GREEN BOX -GRH-EN-MUR-T-RH

Expansion Box

- Cost effective product that adds up to 64 relays in one Expansion box
- Each network can support up to three Expansion boxes
- Maximum of 256 relays in a network

Configurator PN	Munters Description
960-02-00001	GREEN CLIMATE EXP-L-GRH-EN-MUR-230V
960-02-00002	GREEN CLIMATE EXP-L-GRH-EN-MUR-115V
960-15-10001	GREEN FIELD EXP-L-GRH-EN-MUR-230V
960-15-10002	GREEN FIELD EXP-L-GRH-EN-MUR-115V

Comm-Box

Comm-Box supplies complete web access to your controllers from any device with access to the Cloud, including mobile devices. From a single computer, tablet, or smartphone you can manage your entire network.

- Multiple, simultaneous users have network access
- Supports push notifications

Configurator PN	Munters Description
960-13-10019	COMMBOX-GRH-EN-MUR
960-13-10025	COMMBOX-GRH-EN-MUR-CMEU *

* PN can be different according to country modem type

Output Card 24VAC

- 8 relay based outputs per card used to drive external equipment
- All relays have common signal for 24 volt connectivity

Configurator PN	Munters Description
960-99-00002	C-GRH-R24V8
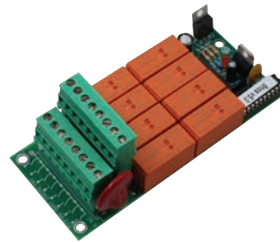
Output Card Dry Contact

- 8 relay based outputs per card used to drive external equipment
- Each relay has independent pair of contacts

Configurator PN	Munters Description
960-99-00003	C-GRH-DRC8
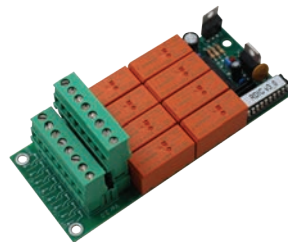
Digital Input Card

- Used to measure digital sensors
- 8 inputs per card
- Dry contact input

Configurator PN	Munters Description
960-99-00004	C-GRH-RDIC8
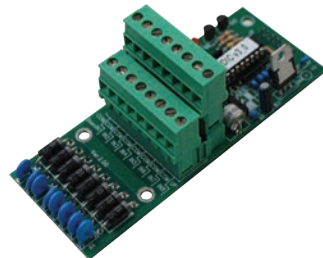
Output Card Analog 0-100%

- 4 outputs per card used to drive external units controlled by 4 – 20 mA
- Card includes surge and lightening protection circuits
- External protection not required

Configurator PN	Munters Description
960-99-00037	C-GRH-AOC4

Analog Input Card

- 11 inputs per card
- Transmits data from sensors such as temperature, radiation, humidity
- Input data can be 0 – 5 VDC or 4 – 20 mA
- Card includes surge and lightening protection circuits
- External protection not required

Configurator PN	Munters Description
960-99-00005	C-GRH-RAIC11
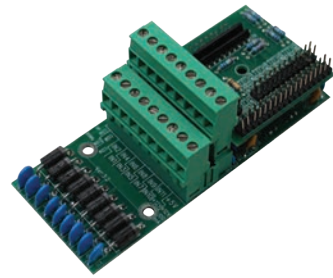
CPU Card

- ARM CPU
- 32 bit CPU
- 8 Mb Flash memory
- Settings backup & software upgrade through SD memory card

Configurator PN	Munters Description
960-99-00010	C-GRH-ARM - GREEN CLIMATE
960-99-00042	C-GRF-ARM - GREENFIELD
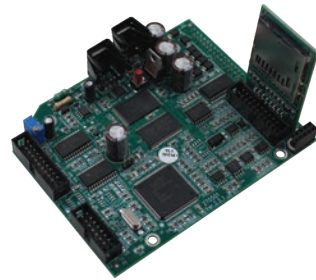
Power Supply Card 115/230 V

- Used to energize the system components
- Has integrated fuses protection

Configurator PN	Munters Description
960-99-00011	C-GRH-PS-V2
960-99-00041	C-GRH-PS-V1

Display card

LCD Display for the System User Interface

Configurator PN	Munters Description
960-99-00033	GREEN FIELD/CLIMATE DISPLAY
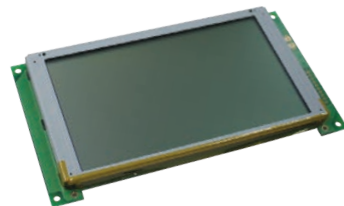
Keyboard Card

Keyboard for the System User Interface

Configurator PN	Munters Description
960-99-00013	C-GRH-KBDLED
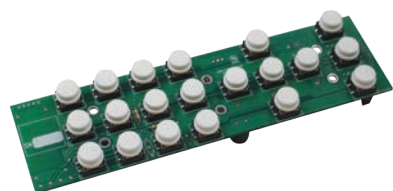
For more information on any of these products:

Go to Munters.com

Or

Contact your Business Unit

Munters
Your Perfect Climate

Your closest distributor

Ag/MIS/PCEN-2743-12/19 Rev 1.2

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