
CUMULUS
by GENAQ
GENAQ
Water from air
Water
from
Air

# cumulus

by GENAQ

GENAQ Cumulus generators are designed with reinforced structure and portability features, to supply high-quality drinking water.

Become independent from any uncontrolled water source and ensure your drinking water availability in any situation.

## APPLICATIONS

Disaster Relief
Humanitarian Aid
Civilian Camps
Military Camps
Development Aid
Etc.









# cumulus C50

by genaq

50 liters per day

0.9 kW




0.39 kWh/liter

Compact and portable

Pure Water

Sustainable

Efficient

Plug & Drink

Autonomous

## Generation (liters per day)

| Relative Humidity (%) | Temperature (°C) 45 | 40 | 35 | 30 | 25 | 20 | 15 | 10 |
|---|---|---|---|---|---|---|---|---|
| 100 | 55 | 55 | 58 | 57 | 36 | 28 | 22 | 17 |
| 90 | 54 | 54 | 56 | 56 | 37 | 29 | 23 | 15 |
| 80 | 53 | 53 | 55 | 52 | 38 | 29 | 23 | 12 |
| 70 | 51 | 49 | 47 | 44 | 32 | 25 | 19 | 9 |
| 60 | 42 | 42 | 41 | 36 | 28 | 22 | 12 | |
| 50 | 31 | 29 | 28 | 26 | 20 | 17 | 8 | |
| 40 | 21 | 19 | 19 | 16 | 14 | 9 | | |
| 30 | 17 | 14 | 13 | 11 | 9 | | | |
| 20 | 13 | 12 | 12 | 8 | | | | |

## Consumption (kWh per liter)

| Relative Humidity (%) | Temperature (°C) 45 | 40 | 35 | 30 | 25 | 20 | 15 | 10 |
|---|---|---|---|---|---|---|---|---|
| 100 | 0.55 | 0.52 | 0.48 | 0.44 | 0.54 | 0.60 | 0.64 | 0.67 |
| 90 | 0.53 | 0.51 | 0.47 | 0.43 | 0.53 | 0.57 | 0.62 | 0.67 |
| 80 | 0.52 | 0.49 | 0.46 | 0.42 | 0.49 | 0.55 | 0.61 | 0.80 |
| 70 | 0.52 | 0.51 | 0.51 | 0.48 | 0.55 | 0.59 | 0.67 | 1.06 |
| 60 | 0.60 | 0.57 | 0.55 | 0.53 | 0.61 | 0.67 | 0.89 | |
| 50 | 0.77 | 0.74 | 0.70 | 0.68 | 0.72 | 0.74 | 1.07 | |
| 40 | 1.01 | 0.99 | 0.95 | 0.92 | 0.92 | 1.06 | | |
| 30 | 1.16 | 1.16 | 1.16 | 1.11 | 1.05 | | | |
| 20 | 1.30 | 1.30 | 1.30 | 1.30 | | | | |

Data measured in Climate Chamber, audited and certified.
Generation may be affected by factors such as height, filter cleaning, wind, etc.

# Features

| | | |
|---|---|---|
| **GENAQ Cumulus C50** | Version | **2.1** |
| | Dimensions (Height x Width x Depth) | **1050 x 390 x 575 mm** |
| | Weight | **70 kg** |
| | Dimensions with reinforced packaging (Height x Width x Depth) | **1400 x 550 x 750 mm** |
| | Weight with reinforced packaging | **133 kg** |
| | Color | **Green** |
| | Manufactured in galvanized steel sheet structure with polyester paint of high resistance to corrosion | |
| **Performance** | Nominal Generation, at 30 °C and 80 % RH (±10 %) | **52 l/day** |
| | Nominal consumption per liter, at 30 °C and 80 % RH (±10 %) | **0.42 kWh/l** |
| | Specific generation, at 23 °C and 60 % RH (±10 %) | **28 l/day** |
| | Specific consumption per liter, at 23 °C and 60 % RH (±10 %) | **0.61 kWh/l** |
| | Pressure sound level at 1m | **72.7 dB (A)** |
| **Power Supply** | Power Supply (Other Voltages Available) | **230V-I-50Hz** |
| | Nominal Power | **1 kW** |
| | Specific power | **0.8 kW** |
| | Plug/Socket | **Type F** |
| **Refrigerant Circuit** | Refrigerant | **R134a** |
| | Evaporation coil built in copper tubes and aluminum fins | |
| | Condensation coil built in copper tubes and aluminum fins | |
| **Air Circuit** | Nominal Air Flow | **F1: 150 $m^3/h$ ; F2: 150 $m^3/h$** |
| | Air Prefilter | **No** |
| | Air Filter | **M5 air filter** |
| **Hydraulic Circuit** | Food grade low density lineal polyethylene tube | |
| | Nominal Water Flow | **1 l/min** |
| | Internal Water Storage | **9 l** |
| | External Water Tank Compatibility | **No** |
| | Water Treatment | **Sediment Filter, Activated Carbon Filter, Ultrafiltration Filter, Zeolite Filter, Mineralization Filter and UV lamp** |
| **Control and Electrical Circuit** | Control | **Emerson DCS, Dixell XW60VS** |
| | Display | **Operation indicators and access via internal display** |
| | IoT | **No** |
| | Electrical and control panel with thermal, magnetothermal and differential protection | |
| | Safety, Alarms, Operating and Defrosting Cycles Control | |
| **Safety Devices** | Protection against refrigerant pressure abnormal levels for high and low pressure | |
| | Automatic resetting thermal protections in the compressor and motor fan | |
| | Protection fuses and electrical panel's general grounding | |
| **Limits** | Temperature Limits | **10 °C to 45 °C** |
| | Relative Humidity Limits | **10 % to 100 %** |
| | Storage Limit | **-15 °C to 70 °C** |
| **Optional** | Alternative Power Supply | Alternative Color |
| | Marine Environment | Solar Compatibility |
| | Consumables Kit | Spare Parts Kit |
| | Plug/Socket Type | |

# cumulus C500

by genaq

## 500 liters per day

## 0.26 kWh/liter

## 5.5 kW

## External tank compatible




Pure Water

Sustainable

Efficient

Plug & Drink

Autonomous

### Generation (liters per day)

| Relative Humidity (%) | Temperature (°C) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 45 | 40 | 35 | 30 | 25 | 20 | 15 | 10 |
| 100 | 451 | 462 | 492 | 518 | 364 | 281 | 227 | 165 |
| 90 | 436 | 454 | 483 | 509 | 361 | 288 | 225 | 165 |
| 80 | 429 | 446 | 475 | 502 | 366 | 280 | 218 | 120 |
| 70 | 398 | 422 | 415 | 427 | 308 | 243 | 183 | 86 |
| 60 | 360 | 373 | 379 | 351 | 267 | 215 | 119 | |
| 50 | 254 | 275 | 264 | 247 | 190 | 160 | 79 | |
| 40 | 179 | 177 | 169 | 149 | 132 | 85 | | |
| 30 | 124 | 121 | 115 | 99 | 79 | | | |
| 20 | 98 | 93 | 86 | 76 | | | | |

### Consumption (kWh per liter)

| Relative Humidity (%) | Temperature (°C) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 45 | 40 | 35 | 30 | 25 | 20 | 15 | 10 |
| 100 | 0.33 | 0.31 | 0.29 | 0.26 | 0.32 | 0.36 | 0.38 | 0.45 |
| 90 | 0.33 | 0.31 | 0.29 | 0.26 | 0.32 | 0.35 | 0.38 | 0.45 |
| 80 | 0.33 | 0.31 | 0.29 | 0.26 | 0.31 | 0.35 | 0.38 | 0.56 |
| 70 | 0.35 | 0.32 | 0.32 | 0.30 | 0.35 | 0.37 | 0.42 | 0.70 |
| 60 | 0.38 | 0.36 | 0.35 | 0.34 | 0.38 | 0.42 | 0.56 | |
| 50 | 0.52 | 0.48 | 0.46 | 0.44 | 0.47 | 0.48 | 0.70 | |
| 40 | 0.67 | 0.66 | 0.64 | 0.61 | 0.61 | 0.71 | | |
| 30 | 0.83 | 0.82 | 0.82 | 0.78 | 0.74 | | | |
| 20 | 0.98 | 0.98 | 0.98 | 0.95 | | | | |

Data measured in Climate Chamber, audited and certified.
Generation may be affected by factors such as height, filter cleaning, wind, etc.

# Features

| | | |
|---|---|---|
| **GENAQ Cumulus C500** | Version | **3.4** |
| | Dimensions (Height x Width x Depth) | **1110 x 1095 x 1300 mm** |
| | Weight | **337 kg** |
| | Dimensions with reinforced packaging (Height x Width x Depth) | **1575 x 1240 x 1550 mm** |
| | Weight with reinforced packaging | **555 kg** |
| | Color | **Green** |
| | Manufactured in galvanized steel sheet structure with polyester paint of high resistance to corrosion | |
| **Performance** | Nominal Generation, at 30 °C and 80 % RH (±10 %) | **502 l/day** |
| | Nominal consumption per liter, at 30 °C and 80 % RH (±10 %) | **0.26 kWh/l** |
| | Specific generation, at 23 °C and 60 % RH (±10 %) | **267 l/day** |
| | Specific consumption per liter, at 23 °C and 60 % RH (±10 %) | **0.38 kWh/l** |
| | Pressure sound level at 1m | **74 dB (A)** |
| **Power Supply** | Power Supply (Other Voltages Available) | **400V-III-50Hz** |
| | Nominal Power | **5.5 kW** |
| | Specific power | **4.3 kW** |
| | Plug/Socket | **32A 5-pin Socket** |
| **Refrigerant Circuit** | Refrigerant | **R134a** |
| | Evaporation coil built in copper tubes and aluminum fins | |
| | Condensation coil built in copper tubes and aluminum fins | |
| **Air Circuit** | Nominal Air Flow | **2000 $m^3/h$** |
| | Air Prefilter | **60 ppi prefilter** |
| | Air Filter | **F7 air filter** |
| **Hydraulic Circuit** | Food grade low density lineal polyethylene tube | |
| | Nominal Water Flow | **P1: 7.6 l/min ; P2: 7.6 l/min** |
| | Internal Water Storage | **14 l** |
| | External Water Tank Compatibility | **Maximum 600 l with recirculation** |
| | Water Treatment | **Sediment Prefilter, Sediment Filter, Activated Carbon Filter, Ultrafiltration Filter, Zeolite Filter, Mineralization Filter and UV lamp** |
| **Control and Electrical Circuit** | Control | **Emerson PLC, Dixell IPG208D-10021** |
| | Display | **VGIPG VISOGRAPH** |
| | IoT | **Included: Remote control via Ethernet, WIFI or M2M** |
| | Electrical and control panel with thermal, magnetothermal and differential protection | |
| | Safety, Alarms, Operating and Defrosting Cycles Control | |
| **Safety Devices** | Protection against refrigerant pressure abnormal levels for high and low pressure | |
| | Automatic resetting thermal protections in the compressor and motor fan | |
| | Protection fuses and electrical panel's general grounding | |
| **Limits** | Temperature Limits | **10 °C to 45 °C** |
| | Relative Humidity Limits | **10 % to 100 %** |
| | Storage Limit | **-15 °C to 70 °C** |
| **Optional** | Alternative Power Supply | Alternative Color |
| | Marine Environment | Solar Compatibility |
| | Consumables Kit | Spare Parts Kit |
| | Soft Starter | Chlorine Dosing Pump |

# CUMULUS C5000

by GENAQ



## 5000 liters per day

## 0.26 kWh/liter

## 55.2 kW

## External tank compatible

Pure Water | Sustainable | Efficient | Plug & Drink | Autonomous

### Generation (liters per day)

| Relative Humidity (%) | Temperature (°C) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 45 | 40 | 35 | 30 | 25 | 20 | 15 | 10 |
| 100 | 4411 | 4513 | 4741 | 4848 | 3305 | 2552 | 2063 | 1471 |
| 90 | 4400 | 4544 | 4769 | 4867 | 3411 | 2721 | 2126 | 1462 |
| 80 | 4655 | 4769 | 5000 | 5091 | 3739 | 2859 | 2229 | 1143 |
| 70 | 4376 | 4444 | 4296 | 4368 | 3150 | 2485 | 1870 | 727 |
| 60 | 3789 | 3867 | 3862 | 3585 | 2726 | 2195 | 1215 | |
| 50 | 2486 | 2585 | 2495 | 2328 | 1793 | 1505 | 744 | |
| 40 | 1773 | 1671 | 1597 | 1406 | 1245 | 800 | | |
| 30 | 1295 | 1137 | 1085 | 932 | 742 | | | |
| 20 | 989 | 841 | 683 | 526 | | | | |

### Consumption (kWh per liter)

| Relative Humidity (%) | Temperature (°C) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 45 | 40 | 35 | 30 | 25 | 20 | 15 | 10 |
| 100 | 0.37 | 0.35 | 0.32 | 0.30 | 0.36 | 0.41 | 0.43 | 0.45 |
| 90 | 0.36 | 0.34 | 0.31 | 0.29 | 0.35 | 0.38 | 0.42 | 0.45 |
| 80 | 0.33 | 0.31 | 0.29 | 0.26 | 0.31 | 0.35 | 0.38 | 0.56 |
| 70 | 0.34 | 0.32 | 0.32 | 0.30 | 0.35 | 0.37 | 0.42 | 0.80 |
| 60 | 0.38 | 0.36 | 0.35 | 0.34 | 0.38 | 0.42 | 0.56 | |
| 50 | 0.56 | 0.52 | 0.49 | 0.48 | 0.51 | 0.52 | 0.75 | |
| 40 | 0.75 | 0.72 | 0.69 | 0.66 | 0.66 | 0.77 | | |
| 30 | 0.88 | 0.88 | 0.88 | 0.85 | 0.81 | | | |
| 20 | 0.95 | 0.95 | 0.95 | 0.95 | | | | |

Data measured in Climate Chamber, audited and certified.
Generation may be affected by factors such as height, filter cleaning, wind, etc.

# Features

| | | |
|---|---|---|
| **GENAQ Cumulus C5000** | Version | **4.0** |
| | Dimensions (Height x Width x Depth) | **2175 x 2270 x 3670 mm** |
| | Weight | **2500 kg** |
| | Dimensions with reinforced packaging (Height x Width x Depth) | **No** |
| | Weight with reinforced packaging | **No** |
| | Color | **Green** |
| | Manufactured in galvanized steel sheet structure with polyester paint of high resistance to corrosion | |
| **Performance** | Nominal Generation, at 30 °C and 80 % RH (±10 %) | **5091 l/day** |
| | Nominal consumption per liter, at 30 °C and 80 % RH (±10 %) | **0.26 kWh/l** |
| | Specific generation, at 23 °C and 60 % RH (±10 %) | **2726 l/day** |
| | Specific consumption per liter, at 23 °C and 60 % RH (±10 %) | **0.38 kWh/l** |
| | Pressure sound level at 1m | **74 dB (A)** |
| **Power Supply** | Power Supply (Other Voltages Available) | **400V-III-50Hz** |
| | Nominal Power | **55.2 kW** |
| | Specific power | **43.2 kW** |
| | Plug/Socket | **125A 5-pin Socket** |
| **Refrigerant Circuit** | Refrigerant | **R134a** |
| | Evaporation coil built in copper tubes and aluminum fins | |
| | Condensation coil built in copper tubes and aluminum fins | |
| **Air Circuit** | Nominal Air Flow | **F1: 7000 $m^3/h$ ; F2: 7000 $m^3/h$ ; F3: 7000 $m^3/h$** |
| | Air Prefilter | **60 ppi prefilter** |
| | Air Filter | **F7 air filter** |
| **Hydraulic Circuit** | Food grade low density lineal polyethylene tube | |
| | Nominal Water Flow | **P1: 25 l/min ; P2: 25 l/min** |
| | Internal Water Storage | **120 l** |
| | External Water Tank Compatibility | **Maximum 2000 l with recirculation** |
| | Water Treatment | **Sediment Filter (three steps), Activated Carbon, Zeolite, Mineralization, Chlorine Dosing and UV lamp** |
| **Control and Electrical Circuit** | Control | **Emerson PLC, Dixell IPG215D-12100** |
| | Display | **VGIPG VISOGRAPH** |
| | IoT | **Included: Remote control via Ethernet, WIFI or M2M** |
| | Electrical and control panel with thermal, magnetothermal and differential protection | |
| | Safety, Alarms, Operating and Defrosting Cycles Control | |
| **Safety Devices** | Protection against refrigerant pressure abnormal levels for high and low pressure | |
| | Automatic resetting thermal protections in the compressor and motor fan | |
| | Protection fuses and electrical panel's general grounding | |
| **Limits** | Temperature Limits | **10 °C to 45 °C** |
| | Relative Humidity Limits | **10 % to 100 %** |
| | Storage Limit | **-15 °C to 70 °C** |
| **Optional** | Alternative Power Supply | Alternative Color |
| | Marine Environment | Solar Compatibility |
| | Consumables Kit | Spare Parts Kit |
| | 20ft Container Adaptation | Power Unit |

# CUMULUS C5000-CO

by GENAQ



5000 liters per day
55.2 kW
20ft integrated solution

0.26 kWh/liter
External tank compatible
2000-liter internal tank

Pure Water | Sustainable | Efficient | Plug & Drink | Autonomous

## Generation (liters per day)

| Relative Humidity (%) | Temperature (°C) 45 | 40 | 35 | 30 | 25 | 20 | 15 | 10 |
|---|---|---|---|---|---|---|---|---|
| 100 | 4411 | 4513 | 4741 | 4848 | 3305 | 2552 | 2063 | 1471 |
| 90 | 4400 | 4544 | 4769 | 4867 | 3411 | 2721 | 2126 | 1462 |
| 80 | 4655 | 4769 | 5000 | 5091 | 3739 | 2859 | 2229 | 1143 |
| 70 | 4376 | 4444 | 4296 | 4368 | 3150 | 2485 | 1870 | 727 |
| 60 | 3789 | 3867 | 3862 | 3585 | 2726 | 2195 | 1215 | |
| 50 | 2486 | 2585 | 2495 | 2328 | 1793 | 1505 | 744 | |
| 40 | 1773 | 1671 | 1597 | 1406 | 1245 | 800 | | |
| 30 | 1295 | 1137 | 1085 | 932 | 742 | | | |
| 20 | 989 | 841 | 683 | 526 | | | | |

## Consumption (kWh per liter)

| Relative Humidity (%) | Temperature (°C) 45 | 40 | 35 | 30 | 25 | 20 | 15 | 10 |
|---|---|---|---|---|---|---|---|---|
| 100 | 0.37 | 0.35 | 0.32 | 0.30 | 0.36 | 0.41 | 0.43 | 0.45 |
| 90 | 0.36 | 0.34 | 0.31 | 0.29 | 0.35 | 0.38 | 0.42 | 0.45 |
| 80 | 0.33 | 0.31 | 0.29 | 0.26 | 0.31 | 0.35 | 0.38 | 0.56 |
| 70 | 0.34 | 0.32 | 0.32 | 0.30 | 0.35 | 0.37 | 0.42 | 0.80 |
| 60 | 0.38 | 0.36 | 0.35 | 0.34 | 0.38 | 0.42 | 0.56 | |
| 50 | 0.56 | 0.52 | 0.49 | 0.48 | 0.51 | 0.52 | 0.75 | |
| 40 | 0.75 | 0.72 | 0.69 | 0.66 | 0.66 | 0.77 | | |
| 30 | 0.88 | 0.88 | 0.88 | 0.85 | 0.81 | | | |
| 20 | 0.95 | 0.95 | 0.95 | 0.95 | | | | |

Data measured in Climate Chamber, audited and certified.
Generation may be affected by factors such as height, filter cleaning, wind, etc.

# Features

| | | |
|---|---|---|
| **GENAQ Cumulus C5000** | Version | **3.2-CO** |
| | Dimensions (Height x Width x Depth) | **2600 x 2240 x 6060 mm (20ft container)** |
| | Weight | **Generator: 8000 kg**<br>**With PU optional: 10000 kg** |
| | Dimensions with reinforced packaging (Height x Width x Depth) | **2600 x 2240 x 6060 mm** |
| | Weight with reinforced packaging | **10000 kg** |
| | Color | **Green** |
| | Manufactured in galvanized steel sheet structure with polyester paint of high resistance to corrosion | |
| **Performance** | Nominal Generation, at 30 °C and 80 % RH (±10 %) | **5091 l/day** |
| | Nominal consumption per liter, at 30 °C and 80 % RH (±10 %) | **0.26 kWh/l** |
| | Specific generation, at 23 °C and 60 % RH (±10 %) | **2726 l/day** |
| | Specific consumption per liter, at 23 °C and 60 % RH (±10 %) | **0.38 kWh/l** |
| | Pressure sound level at 1m | **72 dB(A)** |
| **Power Supply** | Power Supply (Other Voltages Available) | **400V-III-50Hz** |
| | Nominal Power | **55.2 kW** |
| | Specific power | **43.2 kW** |
| | Plug/Socket | **Direct Connection (3 x 70 + N + T mm²)** |
| **Refrigerant Circuit** | Refrigerant | **R134a** |
| | Evaporation coil built in copper tubes and aluminum fins | |
| | Condensation coil built in copper tubes and aluminum fins | |
| **Air Circuit** | Nominal Air Flow | **F1: 7000 m³/h ; F2: 7000 m³/h ; F3: 7000 m³/h** |
| | Air Prefilter | **60 ppi prefilter** |
| | Air Filter | **F7 air filter** |
| **Hydraulic Circuit** | Food grade low density lineal polyethylene tube | |
| | Nominal Water Flow | **P1: 25 l/min ; P2: 25 l/min** |
| | Internal Water Storage | **2000 l** |
| | External Water Tank Compatibility | **Maximum 2000 l with recirculation** |
| | Water Treatment | **Sediment Filter (three steps), Activated Carbon, Zeolite, Mineralization, Chlorine Dosing and UV lamp** |
| **Control and Electrical Circuit** | Control | **Emerson PLC, Dixell IPG215D-12100** |
| | Display | **VGIPG VISOGRAPH** |
| | IoT | **Included: Remote control via Ethernet, WIFI or M2M** |
| | Electrical and control panel with thermal, magnetothermal and differential protection | |
| | Safety, Alarms, Operating and Defrosting Cycles Control | |
| **Safety Devices** | Protection against refrigerant pressure abnormal levels for high and low pressure | |
| | Automatic resetting thermal protections in the compressor and motor fan | |
| | Protection fuses and electrical panel's general grounding | |
| **Limits** | Temperature Limits | **10 °C to 45 °C** |
| | Relative Humidity Limits | **10 % to 100 %** |
| | Storage Limit | **-15 °C to 70 °C** |
| **Optional** | Alternative Power Supply | Alternative Color |
| | Marine Environment | Solar Compatibility |
| | Consumables Kit | Spare Parts Kit |
| | Integrated Power Unit | |