MONITORING AND MANAGEMENT SYSTEMS, CONTROLLERS, AND DOSING SYSTEMS FOR OPTIMIZED IRRIGATION
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ABOUT NETAFIM

NETAFIM IS THE GLOBAL LEADER IN SMART IRRIGATION SOLUTIONS FOR A SUSTAINABLE FUTURE.

29 subsidiaries
4,300 employees
17 manufacturing plants
>110 countries

Founded in 1965, Netafim pioneered the drip revolution, creating a paradigm shift toward low-flow agricultural irrigation.

Today, Netafim provides diverse smart irrigation solutions - from drippers and sprinklers to high-end digital farming solutions and automated systems - for a range of agriculture, landscaping and mining applications. Netafim also offers large-scale and turnkey open-field and greenhouse projects - from design to maintenance - featuring engineering, project management and financing services.

Since its establishment over 50 years ago, Netafim has been the global leader in agricultural irrigation solutions. With hundreds of leading agronomic and technical professionals, numerous state-of-the-art technologies, and decades of implementation experience, Netafim provides a comprehensive, innovative and field-proven offering for all crops, topographies, climates and conditions. Netafim closely accompanies customers from the get-go, offering end-to-end expert guidance and support to help meet their specific needs.

Serving growers of all sizes - from smallholders to large-scale farmers - Netafim is helping the world grow more with less.

1965
Established at Kibbutz Hatzerim

1966
Introduces world’s first commercialized dripper

1981
Opens first subsidiary outside of Israel

1999
Merges into single corporation

2008
Becomes member of UN CEO Water Mandate

2011
Permira funds acquires controlling interest

2013
Named 2013 Stockholm Industry Water Award Laureate

2015

Leveraging over 15 years of technological experience, a growing installed base, and a world-class agronomy department that deeply understands growers’ needs, Netafim is the leading global provider of digital farming solutions. Comprised of three families of cutting-edge and reliable product types - monitoring and management systems, controllers and dosing systems - Netafim’s digital farming offering enables smarter, faster and more accurate irrigation. Taking into account all soil, weather, crop, environmental and hydraulic conditions, our cloud-based solutions present a real-time, in-field situation picture and comprehensive data that can be accessed by a farmer’s PC or mobile device anytime, anywhere. This enables farmers to manage, control and optimize irrigation and fertigation according to the crop’s specific needs. With our digital farming offering, farmers enjoy steadier productivity, lower risk and higher efficiency, leading to greater profitability.
MONITORING & MANAGEMENT SYSTEMS

CUTTING-EDGE SOLUTIONS

Netafim’s monitoring and management systems include rSense - a cutting-edge solution comprised of diverse sensors and a wireless communications system based on advanced radio frequency technology - and uManage state-of-the-art crop management software.

Monitoring all soil, weather, crop, environmental and hydraulic conditions, rSense sensors are connected to a base with an embedded cellular modem that connects to uManage. User-friendly with a simple and intuitive user interface (UI), uManage continuously collects data from the sensors to present a clear, real-time view of a farm’s status. Offering a new user experience (UX), uManage features several easy-to-use tools, including a dynamic dashboard, decision support system (DSS) graphic tool, dynamic map, and navigation panel with online information and easy access to any farm device. Netafim’s comprehensive monitoring and management systems improve growers’ planning and decision making, leading to optimized farm resource utilization and higher yields.
**HIGHLIGHTS**

- Includes a broad array of sensors
- Offers real-time in-field monitoring
- Provides water and nutrient usage traceability
- Enables anytime, anywhere connectivity
- Features user-friendly web user interface

**PRODUCTS**

Netafim’s monitoring and management systems include rSense sensors/wireless communications system and uManage crop management software.

- rSense’s wide range of sensors include:
  - Soil moisture and temperature sensors - NetaSense (VWC of soil), Irrometer (water tension of soil), SM150T by Delta T (soil moisture content), NetaCap by DFM (profile depth soil moisture and temperature)
  - Water meter, fertilizer meter and pressure sensors
  - Dendrometer sensors
  - Meteorological station - meteoSense (air temperature, relative humidity, radiation, solar radiation summary, wind speed, wind direction, rain gauge, daily rain counter, ET calculation, dew point calculation, maximum wind speed)
- uManage - advanced crop management software for sensor data collection and presentation of real-time, in-field situation picture
OVERVIEW
The Vantage Pro2 GroWeather station provides real-time weather updates directly to a grower’s mobile device or PC. Effective under the most demanding conditions, the cloud-based weather station is fully integrated with uManage crop management software, enabling viewing and storing of data on any device - anytime, anywhere.

HIGHLIGHTS & BENEFITS
- Rugged and flexible
- Dependable data transmission
- Simple installation
- High accuracy
- Plug-and-play connection to uManage
- Customized options

DATA COVERAGE
- Air temperature
- Relative humidity
- Radiation
- Wind speed
- Wind direction
- Rain gauge
- Daily rain counter
- ET calculation (evapotranspiration)
- Dew point calculation
- Maximum wind speed
TYPICAL INSTALLATION

ORDER DETAILS

<table>
<thead>
<tr>
<th>SAP #</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>33010-012040</td>
<td>UMANAGE WEATHER STATION F/MOST COUNTRIES</td>
</tr>
</tbody>
</table>

SPECIFICATIONS

- Operating temperature: -40°F-150°F (-40°C-65°C)
- Non-operating temperature: -40°F-158°F (-40°C-70°C)
- Current draw (ISS SIM only): 5mA (average) at 4-6VDC
- Sensors connector: modular sensor RJ-11
- Cable type: 4-conductor, 26 AWG
- Cable length: anemometer 40 feet (12m) (included), 240 feet (73m) (maximum recommended)

For further information, please consult our pre-sales support via Cmt.Support@netafim.com
For assembly and installation information, please go to https://www.youtube.com/watch?v=GNA5SYImNAo
For maintenance information, please go to https://www.youtube.com/watch?v=8UjG9LNec-I
OVERVIEW

The Irrometer tensiometer is a proven and reliable tool that provides users with accurate information on soil moisture status, regardless of soil type, and is fully integrated with uManage software. Measuring soil water tension in centibars (cb) or kilopascals (kPa), the tool determines the amount of energy that a plant’s root system uses to draw water from the soil. By understanding soil moisture activity, users make better informed irrigation scheduling decisions that lead to improved yields and quality, while reducing water, fertilizer, labor and energy costs.

HIGHLIGHTS & BENEFITS

- High accuracy
- Cost-efficient and reliable irrigation scheduling
- Unaffected by salinity with no need for site calibration, thereby offering true soil water potential measurement
- Available in several models for sandy and other soil types, with standard lengths of 30cm, 60cm, 90cm (12”, 24”, 36”) based on crop’s rooting depth

FEATURES & FUNCTIONALITY

- Low-cost voltage output/input transducer
- RoHS-compliant
- Voltage output signal read by rSense unit, enabling real-time data transmission to the grower
- Temperature compensated
**TYPICAL INSTALLATION**

**UPPER TENSIOMETER**
- Placed at the top of the root zone
- Provides data of the wetted bulb’s development in the soil, and indicates the appropriate time to irrigate

**MIDDLE TENSIOMETER**
- Placed at the midpoint of the main fibrous root system
- Provides data regarding the soil’s wetness in the root zone

**_LOWER TENSIOMETER**
- Placed at the bottom of the root zone
- Used to determine if too much or too little water is being applied in each irrigation and the proper time intervals between irrigation to provide data regarding runoff or deep percolation

**ORDER DETAILS**

<table>
<thead>
<tr>
<th>SAP #</th>
<th>DESCRIPTION</th>
<th>REMARKS</th>
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</thead>
<tbody>
<tr>
<td>74390-007910</td>
<td>RSENSE IRROMETER RSU - V-MOST SOILS-30/12</td>
<td>30cm / 12” length</td>
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<tr>
<td>74390-007920</td>
<td>RSENSE IRROMETER RSU - V-MOST SOILS-60/24</td>
<td>60cm / 24” length</td>
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<tr>
<td>74390-007930</td>
<td>RSENSE IRROMETER RSU - V-MOST SOILS-90/36</td>
<td>90cm / 36” length</td>
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<tr>
<td>74390-007940</td>
<td>RSENSE IRROMETER RSU - V-SANDY SOILS-30/12</td>
<td>30cm / 12” length</td>
</tr>
<tr>
<td>74390-007950</td>
<td>RSENSE IRROMETER RSU - V-SANDY SOILS-60/24</td>
<td>60cm / 24” length</td>
</tr>
<tr>
<td>74390-007960</td>
<td>RSENSE IRROMETER RSU - V-SANDY SOILS-90/36</td>
<td>90cm / 36” length</td>
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</tbody>
</table>

**SPECIFICATIONS**
- Output voltage: 0.5-4.5V, 2.5mA
- Accuracy: +/- 2% of full scale
- Weight: 2.16oz (61.22gm)
- Dimensions: 25mm (w) x 30cm (d) x 25cm (h) (1” x 1.88” x 1”)
- Operating temperature: 32°-150°F (0°-66°C)
- Connection: 1/4” NPT brass
- Supply voltage: 5VDC (+/- 0.5 VDC)
- Supply current: 10mA
- Range: 0-94 cb (kPa)

For filling and service information, please go to https://www.youtube.com/watch?v=FDKqEYoG_XQ
NETASENSE V2
SOIL MOISTURE SENSOR FOR ALL SOIL TYPES

OVERVIEW
NetaSense is a soil moisture sensor that works with all soil types. Fully integrated with uManage software, the sensor monitors the volumetric water content (VWC) of the soil based on time domain transmissometry (TDT) technology, which works according to the same operating principle as time domain reflectometry (TDR) technology. Measuring the speed of an electromagnetic wave - the most accurate method of measuring water content in soil - NetaSense enables an immediate and accurate response to changes in soil and moisture levels.

FEATURES & BENEFITS
- Stainless steel, robust all-soil sensor
- Sealed electronics via waterproof epoxy
- High accuracy
- Easy to install
- Integrated with uManage
ORDER DETAILS

<table>
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<th>CAT#</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>74390-003800</td>
<td>RSSEN-NETASENSE SENSOR</td>
</tr>
</tbody>
</table>

SPECIFICATIONS

- Temperature range
  - Operating: 0°C-50°C
  - Storage: -20°C-60°C
- Output format: 0.5-5.0mA
- Power requirements: 5.5-18VDC, 10-20mA (max)
- Accuracy: 1% volumetric soil moisture (can be less accurate)
- Cable length: 2.5m
- Connection: 4 pin Switchcraft connector EN3C3M
- Dimension: 9.5cm (w) x 3.2cm (d) x 270cm (h)
- Weight: 0.5kg
- Typical measurement field: 4cm in all directions from the most external element
OVERVIEW
The Delta T sensor measures soil moisture content. The soil moisture output signal is a differential analog DC voltage that is converted to soil moisture by a data logger or meter using the supplied general soil calibration. The soil moisture content can also be calibrated for specific soils. Fully integrated with uManage crop management software, the sealed plastic body is attached to two sensing rods directly inserted in the soil to enable highly accurate readings.

HIGHLIGHTS & BENEFITS
- Cost-efficient, research-grade sensor
- Dependable
- Accurate to ± 3%
- Rugged, weatherproof and can be buried
- Easy installation at depth in augured holes, and easy removal for servicing
- Low salinity sensitivity
- Excellent stability
- Minimal soil disturbance
- Adaptable to all soil and soilless media types

FEATURES & FUNCTIONALITY
- Waterproof connector to IP68
- Good electrical immunity
- Choice of cabling system options
- Cable connector, cylindrical profile and extension tube design
- Optional temperature-sensor capabilities
TYPICAL INSTALLATION

Surface installation and spot measurements

Alternative installation at depth

ORDER DETAILS

<table>
<thead>
<tr>
<th>CAT #</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>74390-008200</td>
<td>SOIL MOISTURE SENSOR M12 IP68 DELTA-T</td>
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<tr>
<td>74390-008500</td>
<td>DELTA T CABLE 15FT W/PLUG, LONG BARE WIRE</td>
</tr>
<tr>
<td>77100-004448</td>
<td>PG-9 CABLE GLAND</td>
</tr>
</tbody>
</table>
OVERVIEW

The NetaCap profile probe is a multilevel soil moisture and temperature sensor that is fully integrated with uManage crop management software. The easy-to-install probe delivers a complete data package to the grower to improve irrigation planning and strategic decision-making.

HIGHLIGHTS & BENEFITS

- High accuracy and reliability
- Cost-efficient, high-level instrument
- State-of-the-art, proven technology
- Easy-to-use tool
- Ideal for all root zones with any soil type

FEATURES & FUNCTIONALITY

- Temperature compensation
- Soil moisture and temperature data measurement from 6 depths
- Ambient condition measurement via additional temperature sensor at top of probe
- Continuous data collection via uManage
NetaCap probe depths

ORDER DETAILS

<table>
<thead>
<tr>
<th>SAP #</th>
<th>DESCRIPTION</th>
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<tr>
<td>74390-002680</td>
<td>RSENSE MD PROBE - MULTI-DEPTH - 80CM</td>
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</table>

NetaCap probe must be connected to a dedicated rMSense DFM unit. Please consult with CMT pre-sales support on this matter at Cmt.Support@netafim.com

SPECIFICATIONS

- Equipment type: Electronic capacitance continuous logging probe
- Length: 80cm
- Body material: Polyvinyl chloride (PVC plastic)
- Communication: TTL/RS232
- Power source: 3.6V, 500mA regulated supply
- Active state in transit: Not active, not energized
- Packaging for transit: Custom designed box with bubble wrap
**OVERVIEW**

uManage is advanced real-time crop management software providing growers with their farms’ status at a glance. Integrated with rSense, a cutting-edge solution comprised of diverse sensors and RF-based wireless communications, uManage continuously collects data from the field. Anchoring Netafim’s leading monitoring and management systems, uManage enables end users to optimize their farm resources and increase yield.

The software provides user-friendly tools for field monitoring and status:

- Dynamic dashboard
- Graphic tool with real-time crop management and decision support system (DSS)
- Dynamic map to get field status at a glance
- Navigation panel with online information, and simple access to any farm device

**HIGHLIGHTS & BENEFITS**

- Cloud-based software with high availability
- Remote access and support to/from any unit
- Multiple communications interfaces (RF, cellular)
- Low power, long-lasting battery
- Broad array of sensors - soil, hydraulic, weather, plant
- Real-time in-field monitoring
- Water and nutrient usage traceability
- Anywhere, anytime connectivity
- Web and mobile access
- Graph and status updates
- Photography, note-taking, manual data input
RADIO FREQUENCIES

<table>
<thead>
<tr>
<th>TYPE</th>
<th>REGION</th>
<th>RADIO FREQUENCY</th>
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<tbody>
<tr>
<td>A</td>
<td>Europe</td>
<td>865 MHz</td>
</tr>
<tr>
<td>B</td>
<td>Asia Pacific, South America &amp; Australia</td>
<td>915 MHz</td>
</tr>
<tr>
<td>C</td>
<td>Middle East</td>
<td>315 MHz</td>
</tr>
<tr>
<td>D</td>
<td>USA</td>
<td>450 MHZ</td>
</tr>
<tr>
<td>E</td>
<td>China</td>
<td>433 MHZ</td>
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</table>

SYSTEM ARCHITECTURE

The remote rSense site is connected to the rLink base via an embedded cellular modem that connects to the uManage server.

If radio reception is low or there are great distances between sites, the remote rSense site is connected to the rLink router, which connects to the rLink base.

- Note: The customer is responsible for cellular network set-up and operational costs (e.g. SIM card, data package)
ORDER DETAILS

The following commercial kits are available for rSense, rLink and uManage.

**PACKAGE NAME: BASIC**

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>rSense</td>
<td>1</td>
</tr>
<tr>
<td>rLink Cellular</td>
<td>1</td>
</tr>
<tr>
<td>uManage Users (Single License)</td>
<td>1</td>
</tr>
</tbody>
</table>

**Remarks**

Basic monitoring package, 1 digital input, 3 analog inputs

**SKU**

- 74395-001561 UMANAGE-BASIC-KIT-AUS-915-MODEM
- 74395-001564 UMANAGE-BASIC-KIT-CN-433-MODEM
- 74395-001566 UMANAGE-BASIC-KIT-EU-865-MODEM
- 74395-001565 UMANAGE-BASIC-KIT-IL-315-MODEM
- 74395-001560 UMANAGE-BASIC-KIT-US-450-W/O MODEM

**PACKAGE NAME: SMALL-MEDIUM**

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
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</thead>
<tbody>
<tr>
<td>rSense</td>
<td>3</td>
</tr>
<tr>
<td>rLink Cellular</td>
<td>1</td>
</tr>
<tr>
<td>uManage Users (Single License)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Remarks**

For small-to-medium farms, up to 3 rSense & 3 uManage licenses

**SKU**

- 74395-001571 UMANAGE-SMB-KIT-AUS-915-MODEM
- 74395-001572 UMANAGE-SMB-KIT-CN-433-MODEM
- 74395-001573 UMANAGE-SMB-KIT-EU-865-MODEM
- 74395-001574 UMANAGE-SMB-KIT-IL-315-MODEM
- 74395-001575 UMANAGE-SMB-KIT-US-450-W/O MODEM

**PACKAGE NAME: SMALL-MEDIUM**
PACKAGE NAME: PRO/LARGE

<table>
<thead>
<tr>
<th>rSense</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>rLink Cellular</td>
<td>1</td>
</tr>
<tr>
<td>uManage Users (Single License)</td>
<td>3</td>
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</tbody>
</table>

**Remarks**
Professional monitoring package, for large farms, up to 5 rSense & 3 uManage licenses

<table>
<thead>
<tr>
<th>SKU</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>74395-001562</td>
<td>UMANAGE-PRO-KIT-AUS-915-MODEM</td>
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<td>74395-001567</td>
<td>UMANAGE-PRO-KIT-CN-433-MODEM</td>
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<td>74395-001568</td>
<td>UMANAGE-SMB-KIT-EU-865-MODEM</td>
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<td>74395-001569</td>
<td>UMANAGE-SMB-KIT-IL-315-MODEM</td>
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<tr>
<td>74395-001570</td>
<td>UMANAGE-SMB-KIT-US-450-W/O MODEM</td>
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</table>

PACKAGE NAME: PRO/LARGE

<table>
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<tr>
<th>UMANAGE SINGLE LICENSE ONLY</th>
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<th>DESCRIPTION</th>
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<tr>
<td>Single uManage User</td>
<td>74395-001576</td>
<td>UMANAGE-LICENSE-PROMOTION-1 USER</td>
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</table>

**PLEASE NOTE**

To allow maximum flexibility, all rNet products (rSense, rLink, sensors, solar panels, meteoSense) can still be purchased as stand-alone items with existing SKUs.

**USER & INSTALLATION GUIDE**

Scan for installation guides & movies
CONTROLLERS
ADVANCED, RELIABLE AND FLEXIBLE CONTROL SYSTEMS

Netafim’s controllers cover a wide range of open-field and greenhouse irrigation applications regardless of climate or plot condition. Available in AC and DC versions, the advanced, reliable and flexible controllers manage up to 250 irrigation valves in the field, and up to 50 controllers in the same network.

Our robust controllers connect with Netafim’s NMC Air cloud-based software to a gateway that creates a network of between one to five controllers.
HIGHLIGHTS
- Manages up to 250 irrigation valves
- Displays user-friendly programming interface
- Integrates with cellular or Ethernet communications software
- Increases fertigation accuracy

PRODUCTS
Netafim offers a wide range of controllers for open-field and greenhouse applications.
- NMC-PRO - advanced modular, multifunctional system for large plots
- NMC-Junior PRO - cost-effective multifunctional system for small and medium plots
- NMC DC - battery-powered system for large and small plots
- MiniAg - cost-effective system for small-scale open-field applications
- NMC-PRO Climate - cost-effective system for a wide range of greenhouses located in cold or warm environments
OVERVIEW
The NMC-PRO is a state-of-the-art irrigation controller for mid-to-large-scale applications. A robust and user-friendly stand-alone controller that operates under all weather conditions, NMC-PRO is suitable for open field and greenhouse solutions.

HIGHLIGHTS & BENEFITS
- Cost-effective, high-level controller
- Mobile and web remote control via NMC Air
- User-friendly, multilingual interface
- High resistance under all weather conditions
- Modular design

FEATURES & FUNCTIONALITY
- Up to 256 outputs for configuring valve irrigation/cooling/misting
- Up to 8 fertilizer dosing channels
- Up to 6 booster pumps
- Valve control via RF with RadioNet, or via 2-wire cable with SingleNet
- Irrigation strategy based on dosing program, water run time and irrigation program
- Irrigation start based on time, condition, VPD sum, or radiation sum
- Filter flush program start based on either time or delta pressure
- Cooling strategy based on time and actual temperature, as well as on relative humidity sensors
- Misting strategy start based on scheduled time; can also be used as a simple timer program
**TYPICAL INSTALLATION**

NMC-PRO controller with FertiKit 3G dosing system

---

**ORDER DETAILS**

<table>
<thead>
<tr>
<th>SAP #</th>
<th>DESCRIPTION</th>
<th>REMARKS</th>
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<tbody>
<tr>
<td>74340-xxxx</td>
<td>NMC PRO - small</td>
<td>NMC PRO - 11 analog inputs, 8 digital inputs, 24 outputs, RadioNet and SingleNet (optional)</td>
</tr>
<tr>
<td>74340-xxxx</td>
<td>NMC PRO - medium</td>
<td>NMC PRO - 11 analog inputs, 8 digital inputs, 40 outputs, RadioNet and SingleNet (optional)</td>
</tr>
<tr>
<td>74340-xxxx</td>
<td>NMC PRO - large</td>
<td>NMC PRO - 11 analog inputs, 8 digital inputs, 64 outputs, RadioNet and SingleNet (optional)</td>
</tr>
<tr>
<td>74340-xxxx</td>
<td>NMC PRO - giant</td>
<td>NMC PRO - 11 analog inputs, 8 digital inputs, up to 256 outputs, RadioNet and SingleNet (optional)</td>
</tr>
</tbody>
</table>

For specific SAP number please contact our pre-sales support via Cmt.Support@netafim.com
NMC-Junior PRO Controller

OVERVIEW
The NMC-Junior PRO is a cost-effective, multifunctional irrigation controller for small-to-medium-scale applications. Designed for open field and greenhouse applications, NMC-Junior PRO has 15 outputs for flexible configuration.

HIGHLIGHTS & BENEFITS
- Cost-effective
- Mobile and web remote control via NMC Air
- Precise EC and pH monitoring and control
- User-friendly and multilingual interface with large graphical display
- Integrated with FertiKit Nutrigation™ system, or as a stand-alone product
## FEATURES

- 15 flexible outputs
  - Up to 15 valves - irrigation/cooling/misting
  - Up to 6 booster pumps
  - Up to 1 main valve
  - Up to 8 fertilizer dosing channels
  - Up to 3 agitators
  - Up to 15 backflush filter valves

- Inputs
  - 6 digital inputs for water meter, fertilizer meter and delta pressure switch
  - 5 analog inputs for EC, pH, 2 x temperature and relative humidity

- Irrigation strategy is based on a dosing program, water run time program and irrigation program
- Irrigation starts by either time, conditions, VPD sum, or radiation sum
- Filter flush program starts by either time and/or delta pressure (ΔP)
- Cooling strategy is based on time, actual temperature and relative humidity sensors
- Misting strategy starts by scheduled time; this program can also be used as a simple timer program
TYPICAL INSTALLATION
NMC-Junior PRO controller with FertiKit 3G dosing system

ORDER DETAILS

NMC-JUNIOR PRO BASIC CONFIGURATIONS
Stand-alone

<table>
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<tr>
<th>CAT. No.</th>
<th>DESCRIPTION</th>
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<td>74340-005145</td>
<td>NMC-JUN-PRO-IR-SB-115 CONTROLLER</td>
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<td>74340-005135</td>
<td>NMC-JUN-PRO-IR-SB-230 CONTROLLER</td>
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<td>74340-023950</td>
<td>NMC-JUN-PRO-IR-SB-115-485-PL-G CONTROLLER</td>
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<td>74340-023940</td>
<td>NMC-JUN-PRO-IR-SB-230-485-PL CONTROLLER</td>
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<tr>
<td>74340-005140</td>
<td>NMC-JUN-PRO-IR-SB-KC-230 CONTROLLER</td>
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<tr>
<td>74340-023960</td>
<td>NMC-JUN-PRO-IR-DD-115V-PL-G CONTROLLER</td>
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<tr>
<td>74340-023930</td>
<td>NMC-JUN-PRO-IR-SB-230-485-PL CONTROLLER</td>
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<tr>
<td>74340-089100</td>
<td>NMC-JUN-PRO-IR-SB-115-PL-G CONTROLLER</td>
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<tr>
<td>74340-089120</td>
<td>NMC-JUN-PRO-IR-SB-230 CONTROLLER</td>
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<tr>
<td>74340-089130</td>
<td>NMC-JUN-PRO-IR-DD-230-PL CONTROLLER</td>
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<tr>
<td>74340-089140</td>
<td>NMC-JUN-PRO-IR-SB-230-PL CONTROLLER</td>
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<td>74340-089150</td>
<td>NMC-JUN-PRO-IR-SB-12V CONTROLLER</td>
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<tr>
<td>74340-089160</td>
<td>NMC-JUN-PRO-IR-DD-12V CONTROLLER</td>
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<tr>
<td>74340-089170</td>
<td>NMC-JUN-PRO-IR-SB-230-485 CONTROLLER</td>
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<tr>
<td>74340-089180</td>
<td>NMC-JUN-PRO-IR-DD-230-485-PL CONTROLLER</td>
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For FertiKit 3G

<table>
<thead>
<tr>
<th>CAT. No.</th>
<th>DESCRIPTION</th>
<th>COMMENTS</th>
</tr>
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<tbody>
<tr>
<td>74340-010120</td>
<td>NMC-JUNIOR-PRO-FOR-FERTIKIT 80W-230V</td>
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<tr>
<td>74340-010110</td>
<td>NMC-JUNIOR-PRO-FOR-FERTIKIT 80W-115V</td>
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<tr>
<td>74340-010130</td>
<td>NMC-JUNIOR-PRO-FERTIKIT 80W-115V D.DOOR</td>
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<tr>
<td>74340-010135</td>
<td>NMC-JUNIOR-PRO-FERTIKIT 80W-230V D.DOOR</td>
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</tr>
<tr>
<td>74340-010160</td>
<td>NMC-JNKRCN-PRO-SB-CN-230-80W F/FERTIKIT</td>
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UPGRADE FROM NMC-JUNIOR TO NMC-JUNIOR PRO

<table>
<thead>
<tr>
<th>CAT. NO.</th>
<th>DESCRIPTION</th>
<th>COMMENTS</th>
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<tbody>
<tr>
<td>74340-009980</td>
<td>NMC-JUNIOR PRO CPU CARD FOR LED</td>
<td>For NMC Junior with LED display</td>
</tr>
<tr>
<td>74340-009990</td>
<td>NMC-JUNIOR PRO CPU CARD FOR FLUR</td>
<td>For NMC Junior with fluorescent display</td>
</tr>
</tbody>
</table>

POWER SPECIFICATIONS

- 15 outputs: 24 VAC
- Internal surge protector: 115/230 VAC
- Surge protection on inputs and outputs
- Power supply: 115/230 VAC, 35W

AVAILABILITY

Lead time: 4 weeks from receipt of customer’s order.

USER & INSTALLATION GUIDE

An installation guide with comprehensive explanations is provided with the NMC-Junior PRO and can be downloaded from the Netafim Media Center at http://www.netafim.com/media-center
NMC-PRO Climate Controller

OVERVIEW
The NMC-PRO Climate is a multifunctional greenhouse controller covering diverse climatic conditions. The cost-effective controller is suitable for small-to-mid-range greenhouses.

HIGHLIGHTS & BENEFITS
- Advanced climate control management
- Real-time climate control
- Control of up to 4 climate zones in a single controller
- Installation of up to 50 zones in a single network
- Easy integration with NMCnet software for carrying out climate control, operations and management, and with a graphic module for monitoring and analyzing controller performance
- Weather station data sharing with all controllers in the same network
- New temperature and humidity measuring box design, enabling longer durability
FEATURES & FUNCTIONALITY

The NMC-PRO Climate can control diverse modules and components in a greenhouse, including:

- Vents - top and side
- Screens - shading and energy
- Heating - ON/OFF heating and up to 5 water heating networks per zone; upgraded heating network algorithm enables high calculation accuracy, performance and energy efficiency
- Misting - up to 8 misting valves per zone with PID control by temperature, RH and VPD triggers
- Fan and pad - up to 8 fan stages per zone controlled by temperature, RH and/or time (integrated air inlet control)
- Air circulation - controlled by time and/or trigger, temperature and RH

ORDER DETAILS

<table>
<thead>
<tr>
<th>#</th>
<th>SAP #</th>
<th>DESCRIPTION</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>74340-xxxxxx</td>
<td>NMC PRO Climate - 1 zone</td>
<td>NMC PRO Climate - 11 analog inputs, 8 digital inputs, 24 outputs</td>
</tr>
<tr>
<td>2</td>
<td>74340-xxxxxx</td>
<td>NMC PRO Climate - 2 zones</td>
<td>NMC PRO Climate - 11 analog inputs, 8 digital inputs, 40 outputs</td>
</tr>
<tr>
<td>3</td>
<td>74340-xxxxxx</td>
<td>NMC PRO Climate - 3-4 zones</td>
<td>NMC PRO Climate - 22 analog inputs, 8 digital inputs, 64 outputs</td>
</tr>
<tr>
<td>4</td>
<td>74340-xxxxxx</td>
<td>NMC PRO Climate - up to 4 zones</td>
<td>NMC PRO Climate - 44 analog inputs, 8 digital inputs, up to 256 outputs</td>
</tr>
</tbody>
</table>

For specific SAP number please contact our pre-sales support via Cmt.Support@netafim.com
NMC-PRO DC Controller

ADVANCED, ROBUST CONTROLLER FOR FARMING AREAS WITHOUT ELECTRICAL POWER

OVERVIEW

The NMC-PRO DC is an ideal solution for remote farms that have no electricity source. An advanced and robust stand-alone controller, the NMC-PRO DC is suitable for small-to-medium open-field applications.

HIGHLIGHTS & BENEFITS

- Cost-effective, advanced controller
- Mobile and web remote control via NMC Air
- Robust, stand-alone system
- User-friendly and multilingual interface
- Precise EC and pH monitoring and control
FEATURES & FUNCTIONALITY

- Up to 24 outputs for configuring valve irrigation
- Up to 6 booster pumps
- Up to 8 fertilizer dosing channels
- Valve control via RF with RadioNet, or via mono cable with SingleNet
- Irrigation strategy based on dosing program, water run time, and irrigation program
- Irrigation start based on time, condition, VPD sum, or radiation sum
- Filter flush program start based on either time or delta pressure
- Cooling strategy based on time and actual temperature, as well as on relative humidity sensors
- Misting strategy start based on scheduled time; can also be used as a simple timer program

TYPICAL INSTALLATION

NMC-PRO DC controller with FertiKit 3G dosing system

Installation when there is no electricity on site

ORDER DETAILS

<table>
<thead>
<tr>
<th>SAP #</th>
<th>DESCRIPTION</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>74340-xxxxxx</td>
<td>NMC PRO DC</td>
<td>NMC PRO DC - 4 analog inputs, 4 digital inputs, 24 outputs, RadioNet and SingleNet (optional)</td>
</tr>
</tbody>
</table>

For specific SAP number please contact our pre-sales support via Cmt.Support@netafim.com
NMC AIR

ADVANCED CLOUD-BASED SOFTWARE ENABLING REMOTE CONTROL

OVERVIEW

NMC Air is advanced cloud-based software that links to Netafim’s NMC controllers to enable remote monitoring and control of farms anytime, anywhere.

HIGHLIGHTS & BENEFITS

■ Cloud-based software
■ Real-time in-field situation picture
■ Water and nutrient usage traceability
■ Remote farm operations
■ Easy and enjoyable user experience
■ Works with NMC-PRO, NMC-Junior PRO and NMC-PRO DC

FEATURES

■ Farm status and active irrigation and dosing performance in a single view
■ Alarms and notifications to PC and mobile devices
■ Manual NMC irrigation controller operations - pause/resume irrigation, start/stop irrigation program, start/stop irrigation valve, start/stop filter flushing
■ Irrigation, dosing and water run time filter, flushing/misting, and cooling program editing and creation
■ Graph viewing and creation for continuous farm monitoring
■ NMC history for farm data analysis, including sensor log, irrigation log, and incomplete irrigation programs

SYSTEM ARCHITECTURE

■ NMC Air connects up to 5 NMC irrigation controllers in a network via an NMC gateway by means of cellular or Ethernet communications
■ Controllers working with NMC Air:
  ■ NMC-PRO
  ■ NMC-Junior PRO
  ■ NMC-PRO DC
ORDER DETAILS

1. NMC AIR KIT FOR SINGLE NMC-PRO IRRIGATION

<table>
<thead>
<tr>
<th>SAP #</th>
<th>DESCRIPTION</th>
<th>PACKAGE INCLUDES</th>
</tr>
</thead>
<tbody>
<tr>
<td>33900-003000</td>
<td>NMC-AIR-KIT-FOR-NMC-PRO-SINGLE-GW-US-PS</td>
<td>1 Gateway for single NMC PRO with power supply for USA / UK / EU / AU.</td>
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<tr>
<td>33900-003010</td>
<td>NMC-AIR-KIT-FOR-NMC PRO-SINGLE-GW-UK-PS</td>
<td>1 NMC PRO Communication card</td>
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<tr>
<td>33900-003020</td>
<td>NMC-AIR-KIT-FOR-NMC PRO-SINGLE-GW-EU-PS</td>
<td>2 years NMC Air cloud license</td>
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<tr>
<td>33900-003030</td>
<td>NMC-AIR-KIT-FOR-NMC PRO-SINGLE-GW-AU-PS</td>
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</table>

33900-003040 | NMC-AIR-KIT-F/2-5-NMC PRO-MULT-GW-US-PS               | 1 Gateway for single NMC PRO with power supply for USA / UK / EU / AU. |
| 33900-003050 | NMC-AIR-KIT-F/2-5-NMC PRO-MULT-GW-UK-PS               | 1 NMC PRO Communication card                          |
| 33900-003060 | NMC-AIR-KIT-F/2-5-NMC PRO-MULT-GW-EU-PS               | 2 years NMC Air cloud license                          |
| 33900-003070 | NMC-AIR-KIT-F/2-5-NMC PRO-MULT-GW-AU-PS               |                                                        |

2. NMC AIR KIT FOR MULTI NMC-PRO 2-5 CONTROLLERS

<table>
<thead>
<tr>
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<th>DESCRIPTION</th>
<th>PACKAGE INCLUDES</th>
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<td>NMC-AIR-KIT-FOR-JUN-PRO-SINGLE-GW-US-PS</td>
<td>1 Gateway for single NMC PRO with power supply for USA / UK / EU / AU.</td>
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<tr>
<td>33900-003090</td>
<td>NMC-AIR-KIT-FOR-JUN-PRO-SINGLE-GW-UK-PS</td>
<td>1 NMC Junior Pro Communication card</td>
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<tr>
<td>33900-003100</td>
<td>NMC-AIR-KIT-FOR-JUN-PRO-SINGLE-GW-EU-PS</td>
<td>2 years NMC Air cloud license</td>
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<tr>
<td>33900-003110</td>
<td>NMC-AIR-KIT-FOR-JUN-PRO-SINGLE-GW-AU-PS</td>
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3. NMC AIR KIT FOR SINGLE NMC-JUNIOR PRO IRRIGATION

<table>
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<tr>
<th>SAP #</th>
<th>DESCRIPTION</th>
<th>PACKAGE INCLUDES</th>
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<tbody>
<tr>
<td>74340-009980</td>
<td>NMC-JUNIOR PRO CPU CARD FOR LED</td>
<td>Relevant for Junior with LED display</td>
</tr>
<tr>
<td>74340-009990</td>
<td>NMC-JUNIOR PRO CPU CARD FOR FLUR</td>
<td>Relevant for Junior with fluorescent display</td>
</tr>
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</table>

UPGRADE FROM NMC-JUNIOR TO NMC-JUNIOR PRO

<table>
<thead>
<tr>
<th>SAP #</th>
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<td>Relevant for Junior with LED display</td>
</tr>
<tr>
<td>74340-009990</td>
<td>NMC-JUNIOR PRO CPU CARD FOR FLUR</td>
<td>Relevant for Junior with fluorescent display</td>
</tr>
</tbody>
</table>

TUTORIAL VIDEO

Scan for a tutorial video at Netafim’s YouTube channel
VALVE CONTROL SYSTEMS

WIRELESS AND WIRED SOLUTIONS

Netafim offers both wireless and wired valve control systems for remote irrigation monitoring and control. Easy to set up and operate, the systems are comprised of remote terminal units (RTUs), communications and software. Designed to interface with Netafim and third-party controllers, these systems offer the highest level of control and reliability for projects of all sizes, while ensuring grower peace of mind.

RadioNet is a unified wireless monitoring and control system. Built with an advanced design that includes four modular expansion slots, RadioNet enables virtually unlimited monitoring and control configurations and scalability to strengthen performance. Controlling up to 2,000 valves and 2,000 sensors at one time, RadioNet is a secure, energy efficient system that extends geographical coverage between RTUs, while operating effectively in the most extreme climatic conditions.

SingleNet is a 2-wire cable power and communications system. Fast and easy to install, SingleNet is highly reliable, and requires minimum maintenance to ensure effective long-term usage.
HIGHLIGHTS
- Controls all valve operations
- Easily integrates with existing systems
- Lowers hardware and installation costs
- Requires minimal maintenance
- Ensures reliability and peace of mind

PRODUCTS
Netafim offers two valve control systems enabling long-distance irrigation monitoring and control.
- RadioNet - advanced unified wireless monitoring and control system
- SingleNet - 2-wire cable power and communications system
RadioNet
ADVANCED RF VALVE CONTROL

OVERVIEW
RadioNet is a unified wireless monitoring and control system. Featuring an advanced and modular design, RadioNet is comprised of remote terminal units (RTUs), radio frequency (RF) communications, and software to enable long-distance wireless monitoring and control. The user-friendly system ensures reliable and flexible control over RTUs to increase productivity with minimal interruptions at the highest level of scalability.

HIGHLIGHTS & BENEFITS
- Advanced and modular design that easily integrates into existing systems and ensures network stability
- Flexible and versatile to enable system expansion as the enterprise expands
- Repeater technology to avoid infringing objects while covering great distances
- Long-distance signal capabilities
- Control of up to 2,000 valves and 2,000 sensors at one time to provide maximum control and reliability for large-scale projects
FEATURES & FUNCTIONALITY

- Wireless network - optimized seamless wireless network enabling exceptional system architecture with enhanced throughput in virtually any environment
- Modular and scalable - four modular expansion slots enabling virtually unlimited monitoring and control configuration to strengthen performance
- Built-in survey mode - optimal long-term operation with instant spectrum analysis by recording charting frequency interruptions across the entire network from the initial unit installation
- Extended coverage - remote unit operability as a store & forward (S&F) data repeater to increase geographical coverage by up to 3 miles (5km) between every two units, and by a total of 43 miles (70km) with all repeaters
- Easy integration - versatility and easy connectivity (using Modbus protocol) to a wide range of controllers making it a cost-efficient tool for future growth
- Energy efficient - low-power consumption design that typically is in sleep mode (reporting and controlling only when needed) to ensure extended battery life; units can be powered by rechargeable batteries and a solar cell
- Diagnostic reliability - embedded advanced features such as immediate assessment of a frequency failure and remote alerts and diagnostics in the event of service failure
- Secure communications protocol - increased data security operation with multiple layers of encryption and time-based data authentication
- Reliability in extreme conditions - remote unit temperature range of -13°F-185°F (-25°C-85°C)

TYPICAL INSTALLATION

ORDER DETAILS

<table>
<thead>
<tr>
<th>SAP #</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>74330-012000</td>
<td>R-NET HOST COMPLETE UNIT RS485/232</td>
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<td>74330-012100</td>
<td>R-NET BASE STATION</td>
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<tr>
<td>74360-007600</td>
<td>R-NET CENTER UNIT (HOST+BASE+BATT+PS)</td>
</tr>
<tr>
<td>74330-012200</td>
<td>R-NET REMOTE UNIT RTU (1DO, 2DI)</td>
</tr>
<tr>
<td>74330-012195</td>
<td>R-NET RTU 2XDO 2XI</td>
</tr>
<tr>
<td>74330-013140</td>
<td>R-NET EXPANSION CARD 2 X DO/2 X DI</td>
</tr>
<tr>
<td>74330-005120</td>
<td>R-NET MONOPOL.ANT.ANT.430-470 10M GROUND.486</td>
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<tr>
<td>74330-005020</td>
<td>R-NET MONOPOL.ANT.ANT.430-470 3M GROUND.484</td>
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<tr>
<td>74330-005060</td>
<td>R-NET MONOPOL.ANT.ANT.430-470 6M GROUND.485</td>
</tr>
</tbody>
</table>
SingleNet
2-WIRE CABLE VALVE COMMUNICATIONS CONTROL SYSTEM

OVERVIEW
SingleNet is a 2-wire cable power and communications system. Easily operated and monitored over an RTU network, the SingleNet interface communicates with all controllers. Fast and simple to install, SingleNet is a reliable system that requires minimum maintenance ensuring long-term usage.

HIGHLIGHTS & BENEFITS
- Advanced control over valve operations
- Lower cable and installation costs
- Greater reliability and peace of mind

FEATURES & FUNCTIONALITY
- Powered by 12VDC
- Total cable length of up to 10km
- Control of up to 128 remote terminal units (RTUs)
- 2 digital outputs and inputs per RTU
- 2 digital water meter inputs per RTU
- Auto valve shutdown upon communication or power failure
- PC connection for easy setup and monitoring
- Optional plug-in lighting suppression module
TYPICAL INSTALLATION

ORDER DETAILS

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<tr>
<th>SAP #</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>00035-001750</td>
<td>SINGLENET SERIAL INTERFACE UN.RS485/232</td>
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<tr>
<td>74340-001960</td>
<td>SINGLENET HOST IN BRACKET FOR NMC PRO</td>
</tr>
<tr>
<td>74340-014900</td>
<td>SINGLENET RTU 2 LATCH OUT &amp; 2D.IN</td>
</tr>
<tr>
<td>74340-015000</td>
<td>SINGLENET RTU 4 LATCH OUT &amp; 4D.IN</td>
</tr>
<tr>
<td>74340-015100</td>
<td>SINGLENET RTU 6 LATCH OUT &amp; 6D.IN</td>
</tr>
<tr>
<td>74340-015400</td>
<td>SINGLENET RTU 2 LATCH OUT &amp; 2D. IN+PLSM</td>
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<tr>
<td>74340-015500</td>
<td>SINGLENET RTU 4 LATCH OUT &amp; 4D. IN+PLSM</td>
</tr>
<tr>
<td>74340-015600</td>
<td>SINGLENET RTU 6 LATCH OUT &amp; 6D. IN+PLSM</td>
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<tr>
<td>77100-005870</td>
<td>SINGLENET CABLE 1X3X16 GAUGE PE ISOLATION</td>
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<tr>
<td>00035-008200</td>
<td>SINGLENET PLSM LINE SUPPRESSION FOR RTU</td>
</tr>
<tr>
<td>00035-008300</td>
<td>SINGLENET SLSM LINE SUPPRESSION MODULE</td>
</tr>
<tr>
<td>77100-005880</td>
<td>GROUND KIT FOR SINGLENET PLSM</td>
</tr>
</tbody>
</table>
DOSING SYSTEMS

FOR MULTI-SIZED GREENHOUSE & OPEN-FIELD APPLICATIONS

Suitable for greenhouse and open-field applications, our advanced dosing systems integrate with Netafim’s world-leading smart irrigation solutions to ensure the highest level of Nutrigation accuracy, while optimizing water, fertilizer and energy usage. Available in manual or automated versions, our systems are based on the Venturi principle and operate across a wide range of pressures. Robust and reliable, the systems address the specific needs of each plot and crop to create the best conditions for maximized and timely yields.

All of our dosing systems integrate with Netafim or third-party controllers. When linked to NMC Air, Netafim’s advanced cloud-based software, the systems can be remotely accessed via the web or a mobile device, enabling farmers to operate and monitor their growing areas anytime, anywhere.
HIGHLIGHTS
- Covers greenhouse and open-field applications of all sizes
- Works with a wide range of pressures
- Offers perfect EC and pH control
- Integrates with Netafim or third-party controllers
- Operates in manual or automated fashion
- Lowers water, fertilizer and energy usage

PRODUCTS
Netafim offers two groups of dosing systems broken down by three applications.

OPEN FIELDS AND ORCHARDS
- FertiOne - single-channel injection system for electricity-fitted sites

NET HOUSES, OPEN FIELDS AND ORCHARDS
- FertiKit 3G - field-proven, fully configurable dosing system

GREENHOUSES
- NetaJet 4G - most advanced dosing system with the highest Nutrigation precision in minimum time
- NetaFlex 3G - homogeneous dosing system for soilless media applications
FertiOne
SINGLE-CHANNEL, COST-EFFECTIVE FERTILIZER INJECTION SOLUTION

OVERVIEW
FertiOne is a single-channel fertilizer injection solution for open-field sites fitted with electricity. The plug-and-play, fully configurable, and user-friendly FertiOne ensures high efficiency with minimal investment, making it an extremely cost-effective Nutrigation solution.

Built on a sturdy, corrosion-resistant aluminum frame, the system can accommodate different types of dosing channels and a range of single- or three-phase dosing boosters to suit the varied needs of sites. FertiOne is available as a basic manual system or equipped with several controller options, enabling either simple, straightforward operations or advanced quantitative or proportional control.

HIGHLIGHTS
- Modular Nutrigation system
- Standard platform
- Minimal required investment
- Efficient water, fertilizer and energy consumption
- Wide range of irrigated water capacities
- Quantitative or proportional Nutrigation capabilities
- Near maintenance-free Venturi operations - no moving parts
- Highly accurate dosing channel
- Manual or fully automated operations
- Easy integration into existing irrigation systems
- High-quality components and PVC piping
- Aluminum, corrosion-resistant frame with adjustable legs

BENEFITS
- Easy installation and maintenance
- Broad application coverage, including open fields and orchards
- Highly profitable price/performance ratio
- Integrated with NMC and other controllers, as well as with a range of accessories and peripherals
DOSING CHANNEL OPTIONS

- Manual dosing channel
- Electric dosing channel
- Electric dosing channel with fertilizer meter

TYPICAL INSTALLATION

- Venturi-operated dosing channel
- Quick-action dosing valves
- Pressure gauge
- Controller (optional)
- Stainless steel dosing booster
- Dosing booster switchbox
- Check valve
- PVC piping
- Aluminum, corrosion-resistant frame with adjustable legs

COMPONENTS

- Manual valve (isolation)
- Water meter
- Filter station
- Irrigation valve
- Fertilizer/acid stock tank
- FertiOne™

CAPABILITIES

- Ensures an accurate mixture across a wide range of flow capacities
- Accommodates 0.1ha (nursery) to 400ha (plantation) plots

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>STANDARD</th>
<th>OPTIONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controller</td>
<td>Manual (w/o controller)/NMC-Junior/MiniAg, according to customer need</td>
<td>Other controllers on the market</td>
</tr>
<tr>
<td>Suction Flow Rate</td>
<td>100 - 1,000 l/h (0.44 - 4.4 GPM)</td>
<td></td>
</tr>
<tr>
<td>Dosing Channel</td>
<td>Manual/electric</td>
<td>Electric with fertilizer meter</td>
</tr>
<tr>
<td>System Pressure</td>
<td>2-7.5 bar (29-109 Psi), according to the selected dosing booster</td>
<td></td>
</tr>
</tbody>
</table>

For more information, including user and installation manual, please login at: [https://www.netafim.com/product-category/single---channel-injection--manual](https://www.netafim.com/product-category/single---channel-injection--manual)
NetaJet 4G
INDUSTRY’S MOST ADVANCED AND ACCURATE DOSING SYSTEM

OVERVIEW
NetaJet 4G realizes Netafim’s grow more with less concept. Based on Nutrigation technology, the dosing system controls the amount of water and fertilizer used, optimizing resource utilization for each specific land type and crop.

HIGHLIGHTS
- Extremely accurate and reliable, prevents water and fertilizer waste while reducing environmental pollution
- Ensures very precise and homogeneous nutrient dosing for greenhouse crops
- Modular CE-compliant dosing system that easily integrates with multiple Netafim and third-party monitoring and control systems
- Always injects a uniform quantity of nutrients while performing perfect EC and pH control
- Can accommodate a wide variety of dosing channels for fertilizer and concentrated/diluted acid
- Accommodates a variety of system pumps, peripherals and accessories to meet a vast range of applications and infrastructure constraints

BENEFITS
- Easy to install and maintain system
- In-house developed offering
- Versatile flow capacity
- Covers all applications from greenhouse in soil to very intensive soilless media
- Requires minimal investment with rapid ROI
ADVANTAGES

- Equipped with unique innovative analog dosing channels for very accurate and reliable EC/pH control
- Provides fast and accurate fertilizer and acid control
- State-of-the-art technology with unique static mixing chamber
- Very short control cycle
- Efficient water, fertilizer and energy consumption
- Guaranteed EC and pH control
- Near maintenance-free Venturi operations - no moving parts
- Highly accurate dosing channels
- Fast and efficient Nutrigation recipe adjustments
- Multi-lingual capabilities
- Extensive experience with more than 1000 units sold around the globe
- Made by Netafim

FEATURES & FUNCTIONALITY

- High precision
- Smooth and stable hydraulic operation
- No fluctuations
- Fast EC/pH set-point reaching
- Short stabilization time
- Enables short Nutrigation cycles
- No risk of cavitation damage to the booster
**BP PL, OCTA, HIGH-FLOW MODES - BYPASS SYSTEMS FOR PRESSURIZED LINE WATER SOURCE**

**IL PL MODE - INLINE SYSTEM FOR PRESSURIZED LINE WATER SOURCE**

*Flow limitation depends on the fertilizer injection rate and the size of the Venturis.*
BP ST MODE - BYPASS SYSTEM FOR STORAGE TANK WATER SOURCE

SUITABLE FOR MAIN LINE

<table>
<thead>
<tr>
<th>MODE</th>
<th>FLOW RATE</th>
<th>PRESSURE RANGE</th>
<th>DOSING CHANNELS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP ST</td>
<td>15 - 100 m³/h (66 - 440 GPM)</td>
<td>Upstream from the pump: 0 – 0.5 bar (0 – 7.25 PSI)</td>
<td>Up to 5 x 50 - 600 l/hr (13 - 158 GPH)</td>
</tr>
</tbody>
</table>

*Flow limitation depends on the fertilizer injection rate and the size of the Venturis.

IL ST MODE - INLINE SYSTEM FOR STORAGE TANK WATER SOURCE

SUITABLE FOR MAIN LINE

<table>
<thead>
<tr>
<th>MODE</th>
<th>FLOW RATE</th>
<th>PRESSURE RANGE</th>
<th>DOSING CHANNELS</th>
</tr>
</thead>
<tbody>
<tr>
<td>IL ST</td>
<td>Up to 20 m³/h (90 GPM)</td>
<td>Upstream from the pump: 0 – 0.5 bar (0 – 7.25 PSI)</td>
<td>Up to 5 x 50 - 400 l/hr (13 - 105 GPH)</td>
</tr>
</tbody>
</table>
ANALOG DOSING CHANNEL

NetaJet 4G is the first fertilizer dosing system equipped with Netafim’s unique innovative analog dosing channel, the long-time awaited solution for very accurate and reliable EC/pH control for Nutrigation of high-value greenhouse crops.

The analog dosing channel is equipped with a servo motor with a continuous variable opening from 0 to 100%. This unique feature allows unprecedented precise and seamless Nutrigation.

COMPONENTS

- HydroMix static mixing chamber
- Compensation channel with a pressure regulator
- Factory installed PRV at the inlet and a PSV at the outlet
- Selectable analog dosing channels
- Dual EC/pH monitoring and control
- Quick-action dosing valves
- Wide range of integrated accessories and peripherals
- High-quality components and PVC piping
- Aluminum, corrosion-resistant frame with adjustable legs

PERFORMANCE

DIGITAL (ON/OFF) VS. ANALOG DOSING CHANNEL

![Graph showing pH over time for analog and digital dosing channels]

To select the suitable NetaJet for your project, see the online configurator at: https://cmtconfig.netafim.com.

For more information, including user and installation manual, please login at: https://www.netafim.com/product-category/multi-channel-injection-automated
FertiKit 3G PL

COST-EFFECTIVE DOSING SYSTEM

OVERVIEW
FertiKit 3G is a fully-configurable, cost-effective fertilizer/acid dosing unit system that carries out precise Nutrigation. Operating in four modes depending on site conditions, FertiKit 3G optimizes the available water flow rate and pressure usage of the main irrigation line to ensure high efficiency at a low investment. Bringing together over a decade of technological know-how and experience, FertiKit 3G maintains a proven track record under the most stringent environmental conditions.

HIGHLIGHTS
- Modular Nutrigation system
- Wide range of soil/substrate applications
- Built around a standard platform
- Minimal investment requirement
- Efficient water, fertilizer and energy consumption
- Unrivaled range of irrigation water capacities
- Quantitative or proportional Nutrigation capabilities
- Guaranteed EC and pH control
- Near maintenance-free Venturi operations - no moving parts
- Highly accurate dosing channels
- Fast and efficient Nutrigation recipe adjustments
- Manual or fully automated operations
- Easy integration into existing irrigation systems, Netafim’s NMC, and third-party controllers

BENEFITS
- Easy to install and maintain system
- In-house developed offering
- Broad application coverage, including open fields, orchards and others
- Highly profitable price/performance ratio

DOSING CHANNEL OPTIONS

- Manual dosing channel
- Electric dosing channel for up to 600l/h
- Fertilizer meter up to 600l/h
- Hydraulic channel
- Electric dosing channel for 1000l/h
- Fertilizer meter up to 1000l/h
TYPICAL INSTALLATION

COMPONENTS
- Quick-action dosing valves
- Wide range of integrated accessories and peripherals
- High-quality components and PVC piping
- Aluminum, corrosion-resistant frame with adjustable legs

CAPABILITIES
- Versatile flow capacity: from 0.1 Ha (nursery) to 400 Ha (suitable for sugarcane plantations, and all other field crops and orchards)
- Up to 6* highly accurate 50-1,000 l/hour (13-265 GPH) fertilizer/acid dosing channels
* For applications requiring over 6 dosing channels, please contact Netafim

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>STANDARD</th>
<th>OPTIONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controller</td>
<td>NMC - PRO, NMC-XL, NMC-JUNIOR</td>
<td>Other controllers in the market or manual system without controller</td>
</tr>
<tr>
<td>EC/pH Control</td>
<td>Single measurement</td>
<td>None</td>
</tr>
<tr>
<td>Flow Rate</td>
<td>20 - 700 m³/hour (85 - 3000 GPM)</td>
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<tr>
<td>Dosing Channel</td>
<td>Up to 6 x 50-1000 l/hour (13-250 GPH)</td>
<td>Concentrated Acid channel x 50 l/hour (13 GPH)</td>
</tr>
<tr>
<td>System Pressure</td>
<td>2.5-6.5 Bar (36-94 PSI)</td>
<td>Up to 9 Bar (130 PSI)</td>
</tr>
</tbody>
</table>

For more information, including user and installation manual, please log in at:
http://www.netafim.com/product/fertikit-3g
**NetaFlex 3G**

**STATE-OF-THE-ART OPEN TANK MIXING SYSTEM**

**OVERVIEW**

Featuring a state-of-the-art open tank mixing system, Netaflex 3G provides very high level of dosing precision and uniformity for greenhouses crops. A modular CE-compliant dosing system, NetaFlex 3G easily integrates with multiple Netafim and third-party controllers and monitoring systems. NetaFlex always injects a uniform quantity of nutrients and perfect EC and pH control.

**HIGHLIGHTS**

- Modular Nutrigation system
- Wide range of soil/substrate applications
- Built around a standard platform
- Minimal investment requirement
- Efficient water, fertilizer and energy consumption
- Very large range of irrigation water capacities
- Quantitative or proportional Nutrigation capabilities
- Guaranteed EC and pH control
- Near maintenance-free Venturi operations - no moving parts
- Highly accurate dosing channels
- Fast and efficient Nutrigation recipe adjustments
- Easy integration into existing irrigation systems, Netafim’s NMC, and third-party controllers
- Multilingual system

**BENEFITS**

- Easy to install and maintain system
- In-house developed offering
- Covers all applications from greenhouse in soil to very intensive soilless media
- Requires minimal investment with rapid ROI
TYPICAL INSTALLATION

COMPONENTS

- Quick-action dosing valves
- Wide range of integrated accessories and peripherals
- High-quality components and PVC piping
- Aluminum, corrosion-resistant frame with adjustable legs

CAPABILITIES

- Versatile flow capacity: from 0.1Ha to 10Ha
- Up to 6* highly accurate 50-600 l/hr (13-156 gal/hr) fertilizer/acid dosing channels

* For applications requiring over 6 dosing channels, please contact Netafim

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>STANDARD</th>
<th>OPTIONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controller</td>
<td>NMC - PRO</td>
<td>Other controllers in the market</td>
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<td></td>
<td>According to customer need</td>
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<tr>
<td>EC/pH Control</td>
<td>Single measurement</td>
<td>Dual measurement</td>
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<tr>
<td>Flow Rate</td>
<td>3-64 m³/hour (13 - 270 GPM)</td>
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<tr>
<td>Dosing Channel</td>
<td>Up to 6 x 50-600 l/hour (13-156 GPH)</td>
<td>Concentrated Acid channel x 50 l/hour (13 GPH)</td>
</tr>
<tr>
<td>System Pressure</td>
<td>2.0- 4.5 Bar ( 29 - 65 PSI )</td>
<td>Up to 5.5 Bar (80 PSI)</td>
</tr>
</tbody>
</table>

For more information, including user and installation manual, please log in at:
http://www.netafim.com/product-category/nutrigation-
DOSING SYSTEM
SPARE PARTS

ORDER DETAILS

<table>
<thead>
<tr>
<th>SAP #</th>
<th>Description</th>
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<tbody>
<tr>
<td>45000-006701</td>
<td>PH SENSOR JUMO 12MM PLASTIC BARED WIRES (For ABB)</td>
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<tr>
<td>45000-006705</td>
<td>EC SENSOR JUMO TEMPERAT COMPPT100 12MM (For 4G and ABB)</td>
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<td>45000-006692</td>
<td>PH SENSOR JUMO 12MM GLASS W/BNC CONNECT (For 4G)</td>
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<td>70800-001785</td>
<td>BACCARA DOSING VALVE 1/2+EPDM 24VAC50Hz</td>
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<td>70800-001790</td>
<td>BACCARA DOSING VALVE 1/2+EPDM 24VAC60Hz</td>
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<td>70800-001780</td>
<td>BACCARA DOSING VALVE 1/2+VITON 24VAC60Hz</td>
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<td>70800-001770</td>
<td>BACCARA DOSING VALVE 1/2+VITON 24VAC50Hz</td>
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<td>77540-008500</td>
<td>DOSING VALVE FIP S22 24VAC 50/60HZ VITON</td>
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<tr>
<td>77540-008480</td>
<td>DOSING VALVE FIP S12 24VAC 50/60HZ VITON</td>
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<td>77540-004150</td>
<td>Vacuum gauge</td>
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<tr>
<td>77540-003350</td>
<td>Pressure gauge - 250 GLZ 8 bar</td>
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</table>

For specific SAP number please contact our pres-sales support via Cmt.Support@netafim.com
## CONTROLLER SPARE PARTS

### ORDER DETAILS

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<th>DESCRIPTION</th>
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<td>NMC PRO CLIMATE-CPU CARD W/O SD CARD</td>
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<td>74340-014600</td>
<td>NMC PRO IRRIGATION-CPU CARD W/O SD CARD</td>
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<td>74340-012702</td>
<td>NMC PRO-CL EXPANSION CPU CARD</td>
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<td>74340-003680</td>
<td>NMC COMMUN. LIGHTNING PROTECTOR CARD</td>
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<td>74340-010000</td>
<td>NMC POWER LINE PROTECTOR CARD 115V</td>
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<td>74340-003770</td>
<td>NMC POWER LINE PROTECTOR CARD 230V</td>
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<td>NMC PRO 24 V OUTPUT ADDITIONAL CARD</td>
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<td>74340-008900</td>
<td>NMC PRO ANALOG INPUT ADDITIONAL CARD</td>
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<td>74340-009100</td>
<td>NMC PRO COMMUNICATION RS232 CARD</td>
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<td>NMC-PRO INPUT / OUTPUT BUS CARD</td>
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<td>NMC-PRO POWER SUPPLY CARD 115V</td>
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<td>74340-003300</td>
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<td>74340-001950</td>
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<td>74340-004920</td>
<td>NMC LED DISPLAY</td>
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<td>74340-004930</td>
<td>NMC LED DISPLAY 320*240 CN/KR</td>
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<td>74340-004996</td>
<td>NMC-JUNIOR POWER SUPPLY CARD FOR 80W 230</td>
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<td>74340-009490</td>
<td>NMC JUNIOR - INPUTS&amp;OUTPUTS CARD</td>
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<tr>
<td>74340-014750</td>
<td>NMC JUNIOR DOUBLE DOOR EMPTY PLASTIC BOX</td>
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<tr>
<td>74340-014756</td>
<td>NMC JUNIOR EMPTY HIBOX+MOUNTING PLATE</td>
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<tr>
<td>74340-004973</td>
<td>NMC JUNIOR FLAT CABLE FOR DISPLAY CARD</td>
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<td>74340-004972</td>
<td>NMC JUNIOR FLAT CABLE FOR IN/OUT CARD</td>
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<td>NMC JUNIOR OLD EMPTY PLASTIC BOX</td>
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<td>NMC JUNIOR POWER SUPPLY CARD 115VOLT</td>
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<td>NMC JUNIOR / 15 COMMUNICATION RS232 CARD</td>
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<td>74340-022850</td>
<td>BRACKET FOR NMCD + BATTERY HOLDER</td>
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<td>74340-022000</td>
<td>CPU CARD FOR NMCD W/O SD CARD</td>
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<td>74340-022100</td>
<td>NMCD DIGITAL ANALOG INPUTS CARD</td>
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<td>FOUR ZONE LICENSE CARD</td>
</tr>
</tbody>
</table>

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CONTACT INFORMATION

For more product-related information, please contact: CMT.Product.Management@netafim.com
For support issues, please contact your local dealer or service provider,
or Netafim CMT support at: CMT.Support@netafim.com