iMETOS NB IoT

iMETOS NB IoT is a new generation of the iMETOS weather stations, that operates on the NB IoT network. iMETOS NB IoT can be connected to existing NB IoT network, if present at your location. Mounting in the field is done in minutes.

iMETOS NB IoT can handle various sensors. Data is permanently measured in 5-minute intervals and sent every 15 minutes to the server. All the data is synchronized and shown on FieldClimate.

MORE INFO:

metos.at/imetos-nbiot

TECHNICAL SPECIFICATIONS

Model/Type	Processor PIC18 with NB IoT modem
Sensors layout	**3 fixed analogue inputs:** wind speed, leaf wetness and rain gauge
	5 digital inputs: automatic sensor recognition
Housing	UV resistant polycarbonate plastic (Protection class IP65)
Dimensions without sensors	30 cm L x 16 cm W x 19 cm H
Weight without sensors	1.6 kg
Expected range	Wherever NB IoT network is available
Battery	6V charging battery with solar panel
Measuring interval	5 minutes (by default)
Logging and transmission interval	15 min (by default)
Supported sensors	1 rain gauge 0.2 mm or water counter, 1 leaf wetness or 1 pressure switch, 1 temperature & relative humidity (Hygroclip), 2 Watermark sensors, 2 METER Group sensors, 2 temperature sensors (soil, water, leaf, wet bulb) and 1 DC input (global radiation, barometric pressure, water level ...)

Our Platform & Mobile Apps

A complete range of wireless, solar powered monitoring systems under the iMETOS brand comes together on the FieldClimate platform.

ONLINE APP

ng.fieldclimate.com

MOBILE APP

GET IT ON Google Play

Download on the App Store

HYPER LOCALISED WEATHER FORECAST FOR WEATHER-DEPENDENT OPERATIONS

Monitor field accessibility and plant protection conditions, calculate fertilizing efficiency and spraying, sowing, harvesting windows, estimate yield and better plan your field operations.

metos.at/weather-forecast

DISEASE MODELS

With the support of more than 85 disease models for more than 50 crops you will be able to optimize your plant protection strategy. Make conscious decisions and use the best tools to safeguarding your production.

metos.at/disease-models

SOIL MOISTURE & IRRIGATION MANAGEMENT

Monitoring soil moisture and other meteorological variables helps you decide when and how much to irrigate, based on the real need of your crop. Save water and optimize fertilizer efficiency. Improve quality and increase yield.

metos.at/water-management

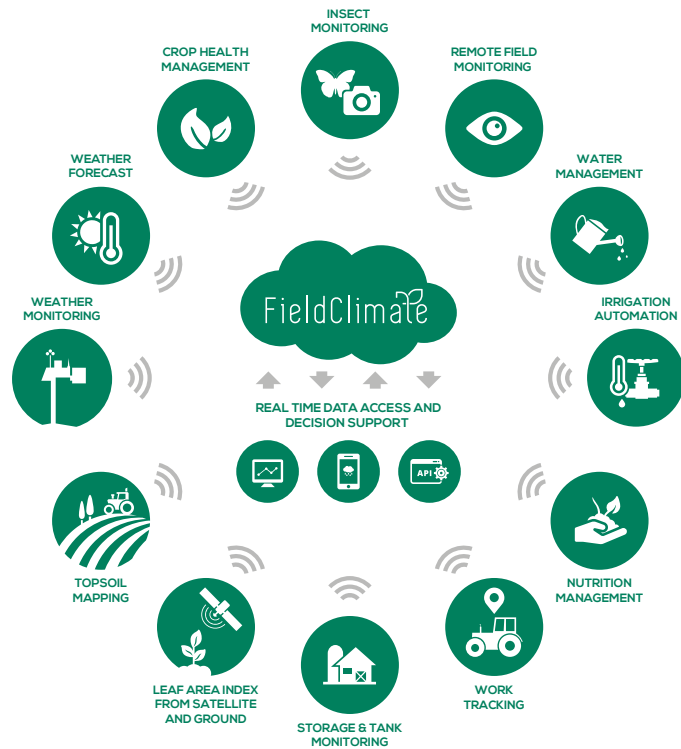# iMETOS NB IoT

Pessl INSTRUMENTS

The iMETOS

The digital age is here. Not only has it become a part of our daily lives; it has also started to change agriculture. With innovative technologies at hand, farmers worldwide are rethinking the management of farms – increasing their yields and income by carefully monitoring and optimizing their inputs.
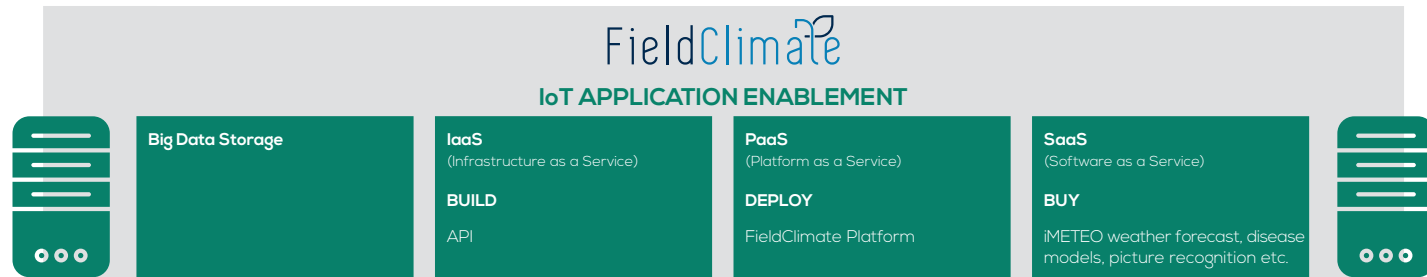
The iMETOS Decision Support Systems play an important role in collecting environmental data, used for the optimization of farm management activities and enhanced fieldwork planning including plant protection and fertilizer applications, field accessibility, harvest window prediction and more.

Over the years, iMETOS has become a global brand with local support, and we are proud to say we managed to reach out to almost every corner of the world. We believe that durable, highly precise technology and support from our trained partners worldwide are the recipe for success. The iMETOS brand lasts longer, performs better, is easier to use and offers you the lowest total cost of ownership.

Applicable in all climate zones and can be used in various industries and for various purposes – from agriculture to research, hydrology, meteorology, flood warning and more.
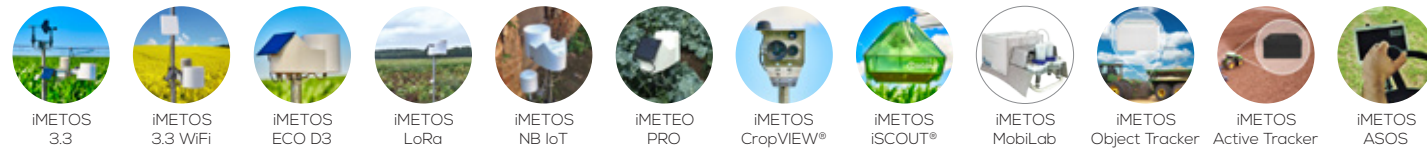

INSECT MONITORING
CROP HEALTH MANAGEMENT
REMOTE FIELD MONITORING
WATER MANAGEMENT
IRRIGATION AUTOMATION
WEATHER FORECAST
WEATHER MONITORING
FieldClimate
REAL TIME DATA ACCESS AND DECISION SUPPORT
TOPSOIL MAPPING
LEAF AREA INDEX FROM SATELLITE AND GROUND
STORAGE & TANK MONITORING
WORK TRACKING
NUTRITION MANAGEMENT

Connectivity

Internet

FieldClimate

IoT APPLICATION ENABLEMENT

Big Data Storage	IaaS (Infrastructure as a Service) **BUILD** API	PaaS (Platform as a Service) **DEPLOY** FieldClimate Platform	SaaS (Software as a Service) **BUY** iMETEO weather forecast, disease models, picture recognition etc.

CONNECTIVITY

WIRED (interface needed: WiFi, LoRa, Bluetooth, …) **Optical Wire** **Copper** **Ethernet** **Cable**	WIRELESS Long Range (Licensed/Public) **GSM, 2G, 3G** **LTE** **LTE Cat 0/Cat 1** **5G** **Satellite**	WIRELESS Short Range (Unlicensed/Public) **WiFi** **Bluetooth** **Radio**	WIRELESS LPWAN **LoRa** (Unlicensed Private/ Hybrid/Public) **SigFox** (Unlicensed Private) **NB-IoT** (Licensed/Public)

MONITORING & LOGGING

iMETOS 3.3 · iMETOS 3.3 WiFi · iMETOS ECO D3 · iMETOS LoRa · iMETOS NB IoT · iMETEO PRO · iMETOS CropVIEW® · iMETOS iSCOUT® · iMETOS MobiLab · iMETOS Object Tracker · iMETOS Active Tracker · iMETOS ASOS

What iMETOS can do for you

IoT/DSS + SOIL ANALYTICS + IRRIGATION + WORK FORCE MANAGEMENT = LESS INPUT/ RISK

Why Choose iMETOS NB IoT

Main advantages for the farmer include:
• Low connectivity costs
• Low power consumption
• Minimal operational costs
• Simple use

Typical range of the NB-IoT enabled IoT devices is 15 kilometers from the base station.

The speed of network is low, and it is intended to transfer only smaller amounts of data (not more than 1 MB).