



IRRIGATION, FERTIGATION & ENERGY MANAGEMENT FOR AGRICULTURE



Smart Irrigation & Fertigation for Agriculture

From irrigation pivots, sprinklers and drip irrigation/fertigation systems to the associated water boreholes and electricity supply, agricultural producers have to execute a wide variety of daily operations, in field across several systems (in many cases from different vendors) to maintain the productions up and running.

Compta Emerging Business offers a cloud based integrated platform, designed to help agriculture producers on the effective management, control, programming and reporting across the different irrigation and fertigation systems including the associated energy supply sources.



Anytime, Anywhere - Smart Agriculture

- Integrated Operations: single platform for multiple systems management
- Multi-Vendor Capable: supports integration with the more popular irrigation equipment manufacturers
- Efficiency Gains: reduces the operations complexity and related execution work-times.

- Savings: Water, energy and human-resources.
- Real-time Data-Access & Consolidated Reporting
- Predictive Control: Integration with meteorological information for predictive irrigation
- Cloud based solution.





IRRIGATION, FERTIGATION & ENERGY Resources Management for Agriculture			
Main Features (applicable for both Irrigation and Liquid Fertilization systems)			
	BEE 2 CROP Remote Management for Irrigation Pivots (Center, Lateral move and Nozzle pivot types)	BEE 2 IRRIGATION Remote Management for Sprinkler and Drip Irrigation Systems	BEE 2 ENERGY Energy Consumption Management (Borehole Pumps, Water Meters/Flowmeters, Electricity Meters)
Remote Control	<ul style="list-style-type: none"> • On/Off; • Water: On/Off; • Direction • Auto-rev/Barrier; • Speed % setting • Flowmeter (m3/h) • Pressure (bar) 	<ul style="list-style-type: none"> • On/Off; • Water: On/Off; • Flowmeter (m3/h) • Pressure (bar) • Water % per type of production 	<ul style="list-style-type: none"> • On/Off; • Fail detection • Flow Set Points
Indicators	<ul style="list-style-type: none"> • Rainfall (mm); • Operating time (h); • Water Consumption (m3) • Meteorological information for the next 5 days 	<ul style="list-style-type: none"> • Rainfall (mm); • Operating time (h); • Water Consumption (m3) • Meteorological information for the next 5 days 	<ul style="list-style-type: none"> • Real-time & Historical consumptions view. • Cost (immediate and historical)
Programming & Settings	<ul style="list-style-type: none"> • Pivot Length/type setup; • Irrigation-chart upload • Pressure time-outs set-points; • Time-Based Programming; • On/off water by angle; • Variation of rainfall by angle; • On/off Fertilizer by Angle; • On/off Tower Cannon by Angle; • Predictive Programming (sensing/meteo based) • User profiles & permissions 	<ul style="list-style-type: none"> • Irrigation-chart upload; • Time-Based Programming; • Electro valve individual settings; • Copy-paste of programs from system to system. • Automated & Synched Program starts; • Test/Simulated Programs; • Predictive Programming (sensing/meteo based); • User profiles & permissions; 	<ul style="list-style-type: none"> • Tariff-Plan based programming. • Saving Charts in local currency • Expected vs Effective expenditure • Expected cost per Program
Alarms (Console, e-mail, SMS)	<ul style="list-style-type: none"> • Lack of tension • Jammed • End of Progress • Theft of Cables • Control Panel Access • Manual Control status • User defined Alerts. 	<ul style="list-style-type: none"> • Lack of tension • Lack of pressure • End of Program • Disconnected • Manual Control status • User defined Alerts. 	<ul style="list-style-type: none"> • Abnormal Consumptions. • Power Outage. • Connectivity outage. • User defined Alerts.
Reporting	<ul style="list-style-type: none"> • Real-time reporting • User-defined historical reports 	<ul style="list-style-type: none"> • Real-time reporting • User-defined historical reports 	<ul style="list-style-type: none"> • Real-time reporting • User-defined historical reports

Sensing & Predicting: Multiple Integrated Parameters for Smarter Operations

On-top of the base features provided for Irrigation/Fertigation remote control, Compta solution is ready to integrate with a wide variety of agricultural sensors (soil analysers, humidity probes, meteo probes, evapotranspiration sensors, etc), so your operations get even more smart, automated and effective. Common indicators/tags that outcome from sensing include:

- Evapotranspiration
- Precipitation (instant/accumulated)
- Wind speed
- Air temperature (min, max, avg)
- Relative humidity
- Radiation
- Sunshine hours
- Cold hours
- Cloud Percentage
- Freezing risk
- Fire risk
- Soil temperature (min, max, avg)