KARSTEMS

M8 Systems EVERY DROP COUNTS[™]

Presented by Max Safai, CEO/Founder

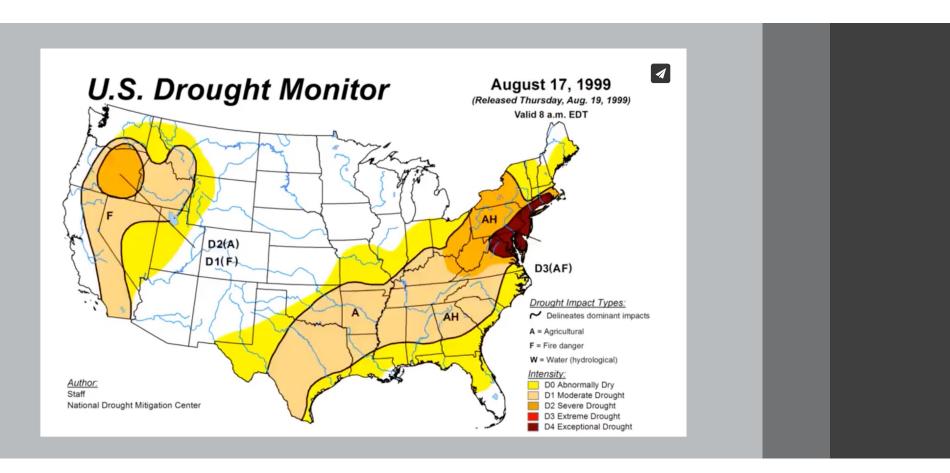
The Problem

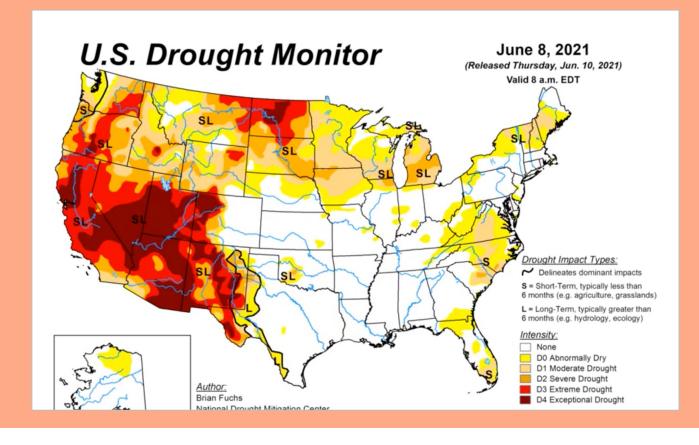
The Perfect Storm

- Climate Change
- Extreme Drought
- Water Shortage
- Population Increase
- Labor Cost Increase

(I-918, Petition for U Nonimmigrant Status)









The Solution

Harnessing the Future of Precision Agriculture

- Labor Cost Reduction
- Reduce Irrigation Cost
 - Eliminate excess irrigation
 - Eliminate leaks
- Factor in Local Microclimate
- Factor in the Farmed Soil
- Increase Yield/Acre





Impact

M8 Systems is installed in 5 Farms for almost 1 full year (Zero Failure)

Lessons learned

What is important to Row Crops / Seasonal Crops: What				
 Automation & Precision in Irrigation 	Leak D			
 75% Reduction of irrigation labor cost (\$500/Acre/Season) 	Case S			
 Case Study Grimmway Farms, 20 Acres Lot 	2 Inch I			
 Without M8 Systems, 300 Hours Labor, \$9,030 	Observ			
 With M8 Systems, 32 Hours Labor, \$960 	Would			
 Reduction of \$8,070 or 89% Labor Cost Reduction! 	Cost of			

Cost of 8 WaterGuards 3 Inch recovered within 12 months!

Total Automation, real time leak detection Adding Agronomy Data

ortant to Permanent Crops / Orchards:

Detection (6-12% avg Reduction in cost of Irrigation) Study Soledad 20 Acres (Vista / San Diego County) Pipes, 6 irrigation per month, 12-15 hours cycles ved 2 leaks,

have resulted in \$2,510 (Monies saved!)

of 1 WaterGuard 2 Inch recovered in First Season!



Our Mission

Make Every Drop Count!

To meet the growing global challenges of food and water scarcity combined with rising farm operating costs.

- Ingest data from existing sensors
- Connect existing irrigation hardware & disjointed systems
- Use AI backed cloud-based dashboard
- Precise irrigation and automation
- Empower farmers

Disrupt the global Ag Market, transform agriculture for our customers and make **Precision Agriculture** a reality.





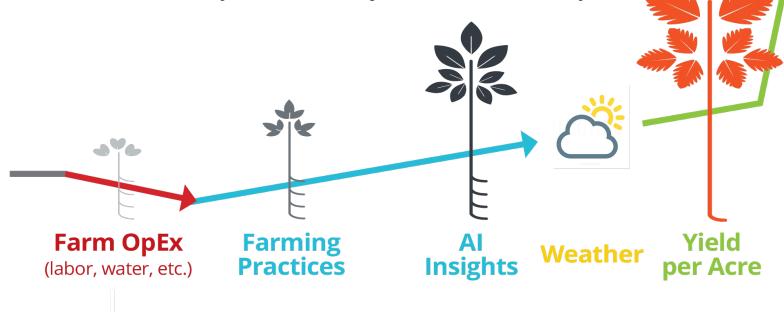
What Farmers Tell Us!

PAIN POINTS IDENTIFICATION

Farmers agree, greater yields can be produced using fewer inputs (water, nutrients, pest controls) when they have consistent, timely access to information.

★ DIGITAL ENGAGEMENT

The crucial interplay for Ag is between automation and analytics to optimize yield/acre. By monitoring incident alerts, costs and progress live, the grower has the ability to make adjustments instantly.



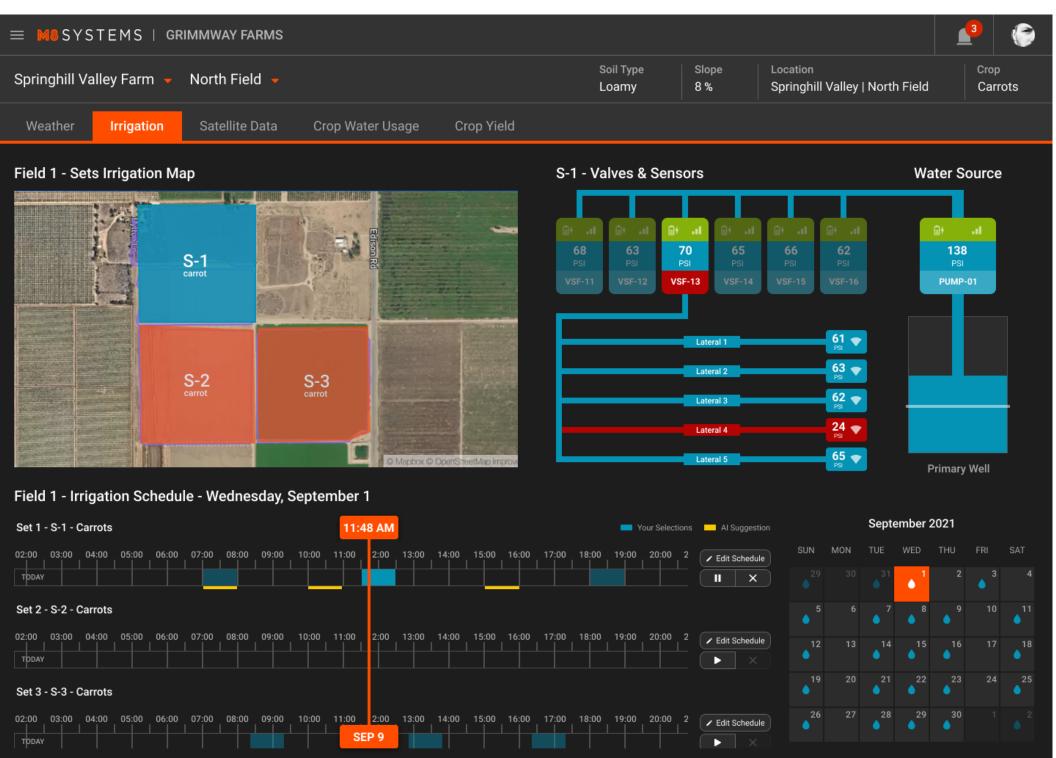


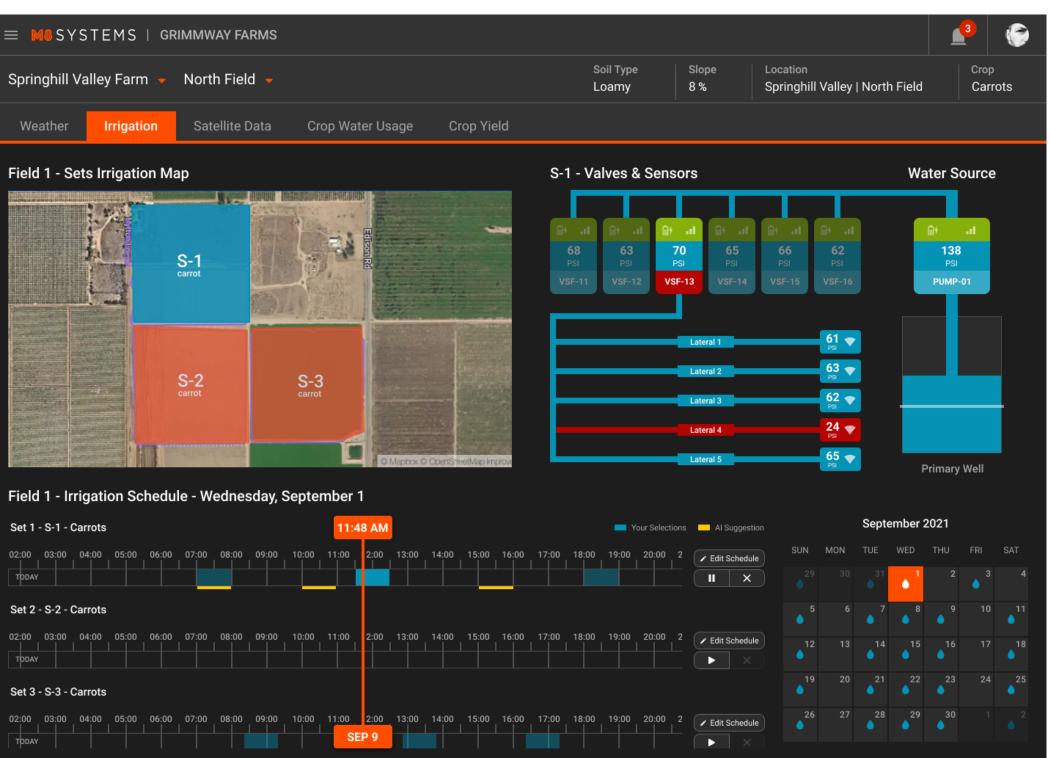
Solution

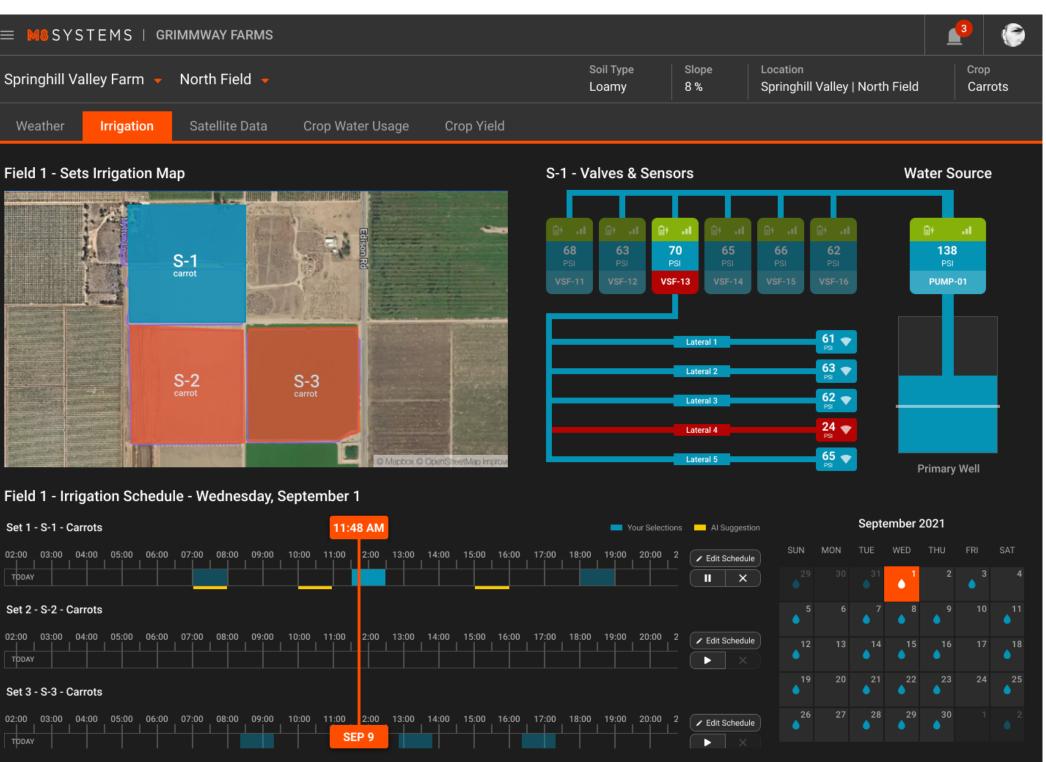
M8 Systems is delivering the first device-agnostic integrated AIoT Ag Intelligence Platform. Water and Labor are the largest cost centers in farming.

M8 Systems' platform enables:

- Precise irrigation and leak detection •
- Total automation to reduce OpEx •
- Increase of yield with an all-inclusive dashboard
- Machine learning and farmer AI-assist insights •









Market & Market Size

There are 8.8M acres of pressurized irrigation in California alone, 55.6M acres in the United States, and 924M acres worldwide. An average farm is about 200 acres* with approximately 15 valves per 80 to 100 acres.

CALIFORNIA 8.8M IRRIGATED ACRES 37% are pressurized and in water distressed regions 16K TARGET FARMS* 170M SaaS TAM

USA 55.6M IRRIGATED ACRES

30% are estimated to be pressurized and in water distressed regions 83K TARGET FARMS* 890M SaaS TAM

WORLDWIDE 924M IRRIGATED ACRES

24% are estimated to be pressurized and in water distressed regions 1.1M TARGET FARMS* 12B SaaS TAM



Go To Market

We engage large farms directly which will augment our AI engine and will improve insights our platform will deliver. **We are currently being**

evaluated at the largest carrot producing farm in the world.

- We will support smaller farms with channel partners and irrigation equipment distributors.
- We will sell licenses of our reference design to existing irrigation equipment manufacturers.



"Our Ranch Manager loves your software. It's the easiest solution we've seen. Everything we've used so far from M8 Systems is working great and superior to other solutions we have evaluated! M8 Systems is certainly heading down the right road!" – Kevin Keillor, Irrigation Manager, Grimmway Farms This version plays the video in this window.



- Hover over screen above and click **Play** to watch M8 Systems' technology at Grimmway Farms, Bakersfield, CA.
 To watch video in a browser window, enter <u>https://youtu.be/olrrpoHCTJo</u>





Crop Uniformity with Precision Irrigation



Grimmway Farms, June 2021





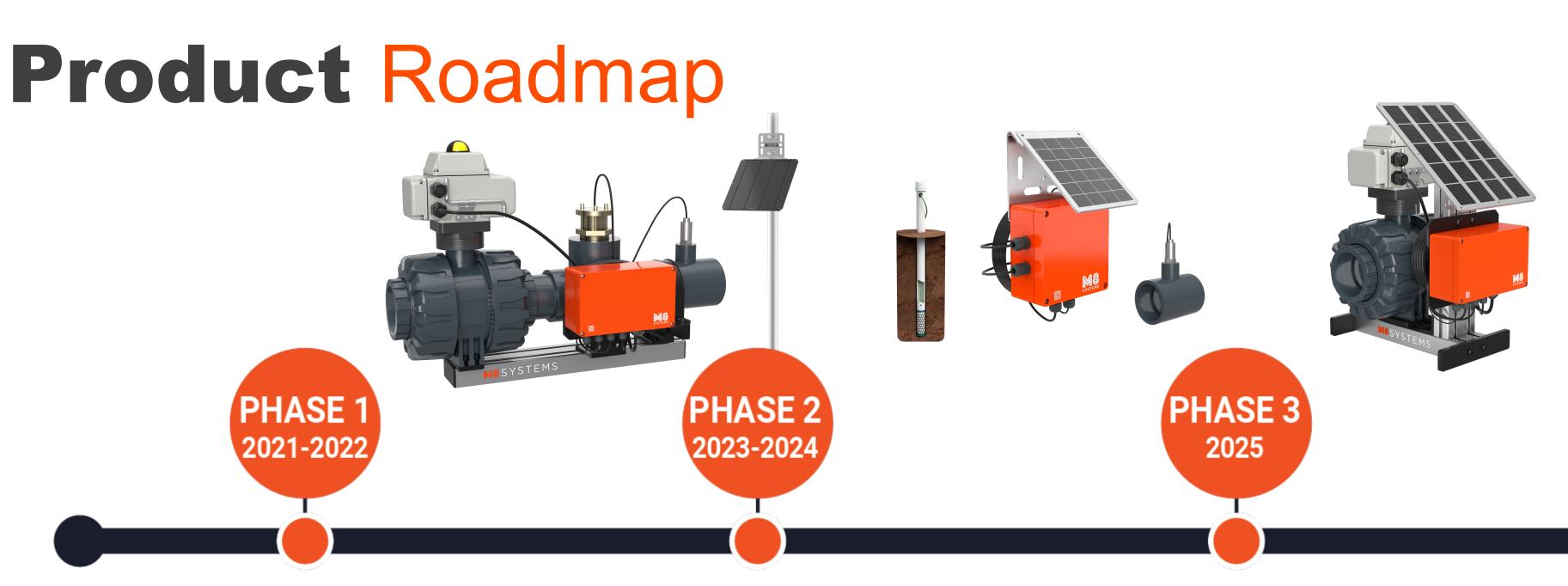
Business Model

M8 Systems sells *Software as a Service* (SaaS) for our Ag Intelligence Platform to growers, generating an ARR stream.

- We will generate additional revenue streams by selling hardware licenses to irrigation equipment manufacturers.
- We sell our software license by targeting a 3-year renewable subscription contract.







- License Reference Design
- Cloud & Data Infrastructure
- Total Automation
- Leak Detection
- Mobile App & Notifications
- Collect Data Set

- Sell SaaS SW Licenses
- Ingest Farm Data
- Organize Data Warehouses
- Use Agro monitoring Data
- Dashboard App
- Machine Learning & Modeling

- Advance Monitoring
- Advanced Dashboard
- Al Assistance



Competitors + Competitive Advantage

M8 Systems is alone in providing a true **Ag Intelligence Platform:**

- Tracks and controls
- **Provides AI-Collaboration**
- Supports multiple brands of digital farm hardware

Competitors in the Market:

- Single-brand focusedNelson, Jain and Wiseconn (legacy products)
- Time based only •
- Limited control
- No feedback from other farm sensors
- No budgeting features •

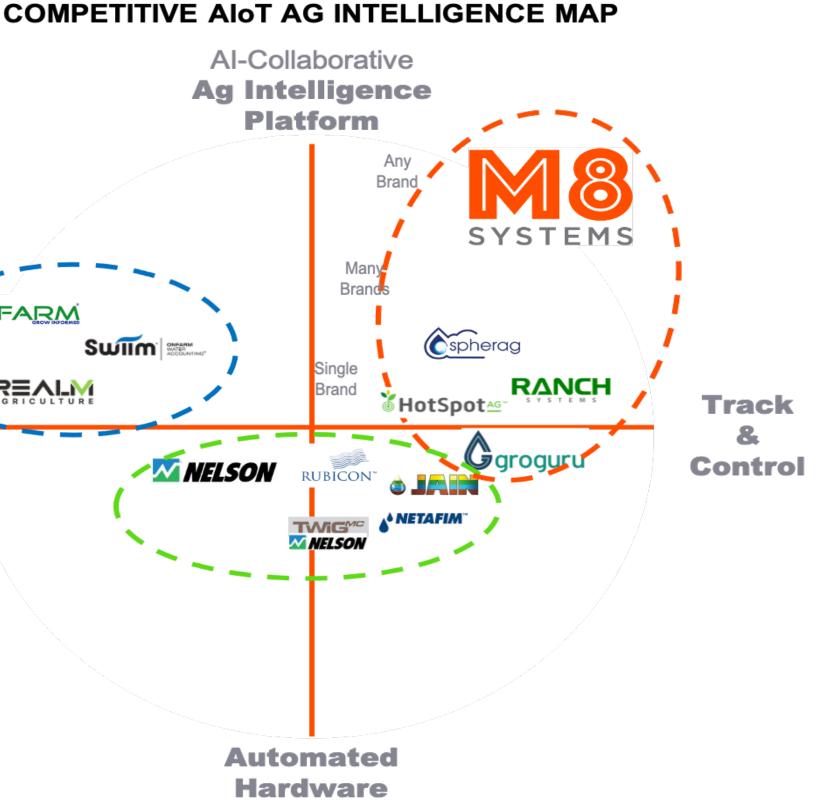
OnFarm & RealmV (emerging products)

- Some Data Capture
- No Control over farm

GroGuru, HotSpot & Ranch Sys. (moving toward Data Capture)

- Poor integration of disjointed systems
- Poor Farm Management
- Poor Data Sets, Models and AI

UNFARM REVIN Track Only





Revenue

Growers adopt new technologies cautiously. Our topline growth reflects this initial slow build pattern, followed by channel partner sales ramping in 2022, and an additive impact of SaaS recurring revenue streams starting in 2023.

We expect to see the 'hockey stick'-type growth in 2025.



Proforma	2021	2022	2023	2024	2025
Lots/Customers	4	77	270	615	1,250
Revenues	126,176	2,255,006	9,218,170	25,230,352	56,398,192
COGS +OpEx	1,086,674	3,027,241	7,291,268	18,120,918	38,892,774
EBITDA	(958,998)	(766,736)	1,940,152	7,149,434	17,575,419

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FarmLink **IOT VALVE**

Ag Intelligence Platform Precise Water Management

M8 Systems' FarmLink IoT Valve delivers precise water management and enables total automation. No need to change the existing irrigation architecture! Two versions are available for various pipe sizes: Permanent Crops and Row Crops.

Smart Irrigation

- Easy to set, edit, and understand irrigation calendar
 Systematic accurate water volume delivery
- With its smart battery, this valve is never asleep and

is accessible remotely 24/7 **Reduced Cost of Operations**

- 24/7 Automated leak and clog detection with notification¹ · Immediate alerts worldwide and automatic shutoff
- Optional flow and pressure measurement²
- 24/7 Remote Accessibility
- Open and close valves anytime, from anywhere
 Set irrigation schedules from mobile phone
- Real time alerts through text messaging
- Analytics and insights





This feature is enabled with pressure sensors are installed at the end of the laterals. This feature is available on the valves with the PF option.

Harnessing the Future of Precision Agriculture

STANDARD FEATURES

- Water flow sensor² Pressure sensor²
- Manual valve bypass
- Auto Irrigation schedule 12VDC 10-Watt valve drive
- Solar charging
- Cellular communication

OPTIONS

 24VDC 80-Watt valve drive LoRa WAN communication

	PRODUCTS	
	WG 2" IoT Valve	Ball Valve, Controller & Battery, Solar Panel
	WG 2" IoT Valve PF	Ball Valve, Controller & Battery, Solar Panel, Pressure & Flow Sensors
	WG 3" IoT Valve	Ball Valve, Controller & Battery, Solar Panel
	WG 3" IoT Valve PF	Ball Valve, Controller & Battery, Solar Panel, Pressure & Flow Sensors
	WG 4″ IoT Valve	Ball Valve, Controller & Battery, Solar Panel
	WG 4" IoT Valve PF	Ball Valve, Controller & Battery, Solar Panel, Pressure & Flow Sensors

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Visit M8Systems.com or Scan the QR code to learn more.



FarmLink **PUMP CONTROLLER**

Precise Pump Management with FarmLink Pump Controller

M8 Systems is the Ag IoT End-to-End Irrigation Management Solution that delivers true operational efficiencies. FarmLink Pump Controller enables remote pump management from mobile devices.

Smart Irrigation

- Able to control: Regular Pumps
- **Reduced Cost of Operations**
- Wireless remote pump control Eliminate/reduces greatly in-person visits for

24/7 Remote Accessibility

Turn on or shut off pumps anytime, from anywhere Monitor pump operation in real time



Harnessing the Future of

Precision Agriculture

STANDARD FEATURES

Pump Control

Solar charging

Cellular communication

Water Pressure Sensor¹

LoRa WAN communication

Water Flow Sensor¹

Smart battery

OPTIONS



FarmLink **SOIL MONITOR**

Precise Soil Monitoring with **FarmLink Soil Monitor**

M8 Systems' FarmLink Soil Monitor can accept up to 12 different farm sensors - soil moisture, temperature, etc. helpingh farmers improving crop yield.

Soil Monitoring

- Able to monitor:
- Soil Moisture Temperature
- Weather and environmental sensors
- Root zone, and more

M8 Systems Cloud

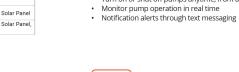
- Ingests various data
 Provides analytics
- Identifies patterns
- Provides insights

24/7 Remote Accessibility Agronomy data

- NDVI (non differential vegetation index)
- EVI (enhanced vegetation index)Soil moisture non-uniformity



Visit **M8Systems.com** or Scan the OR code to learn more.





Harnessing the Future of Precision Agriculture

STANDARD FEATURES

- Soil monitoring
- Solar charging Smart battery
- LoRa WAN communication

OPTIONS

- Cellular communication
- Water Quality Sensors
- Pressure Sensors



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FarmLink **VALVE CONTROLLER**

Precise Water Management with FarmLink Valve Controller

M8 Systems' FarmLink Valve Controller is compatible with most recent solenoid-based valves, it enables cost savings through automation and reducing irrigation labor costs.

Smart Irrigation

- Easy to set, edit, and understand irrigation calendar
- Systematic accurate water volume delivery

Reduced Cost of Operations

- 24/7 Automated valve operation
- 24/7 Automated leak and clog detection with notification¹
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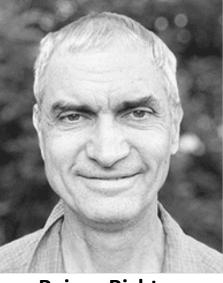
M8 Systems Team & Advisors



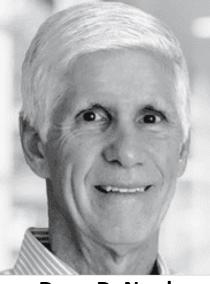
Max Safai CEO / Founder VP Hardware Engineer, Amazon



Lawson Fisher Hardware Engineering Manager SR Manager Electrical Engineering, Omnicell, Inc.



Rainer Richter Systems Engineering Manager SR Software Engineer, Omnicell, Inc.



Doug DeNardo Finance Director Director of Finance, Neato Robotics



Richard Foley VP Sales Founder/Chairman, Ewing-Foley BOD, Momentum for Mental Health



Kristi Richter Software Engineer Microsoft Corp.



Clay Bendigkeit Strategic Partnerships



Dale Jones Product Manager



Isabelle Safai Account Manager Software Engineer, Omnicell, Inc. Front End IoT Stack



Eve Ragins Software Engineer

Chris Durkin SR Software Engineer



Liam Durkin Software Engineer



Matt Cettei Software Engineer Software Engineering Manager, Omnicell, Inc.



Neil Gillet Firmware Engineer



Tania Tuluie Creative Director



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Thank you!

