

Ayyeka Industrial IoT Devices

By utilizing Ayyeka's state-of-the art Industrial IoT technology, remote monitoring operations can benefit from greater efficiency, reduced system breakdowns and better regulatory adherence. With robust software integrated into the devices' systems, continuous monitoring provides powerful situational awareness that helps to ensure smooth operation and reduced site visits. It offers ruggedized IP68, NEMA6p hardware, and a powerful feature-rich Al-driven software platform that integrates with almost any 3rd party industrial data management platform.

FEATURES

- High compatibility attach any sensor to any software system
- Efficient plug-and-play installation connects to new and existing infrastructure saving time and money
- High level security with encryption, authentication and remote updates
- Comprehensive with all required equipment and services
- Solar or AC Power Options



Wavelet 4RUltimate Scalability





Wavelet V2Ultimate Versatility

Wavelet Ex V2
Explosive Environment



CALL GEOTECH TODAY (800) 833-7958

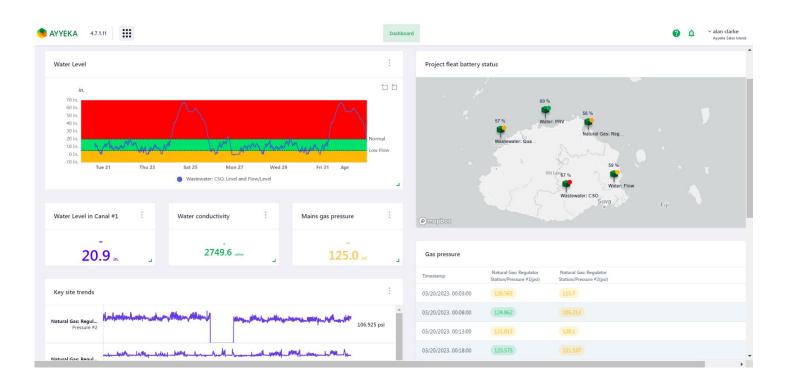
Geotech Environmental Equipment, Inc.
2650 East 40th Avenue • Denver, Colorado 80205
(303) 320-4764 • (800) 833-7958 • FAX (303) 322-7242
email: sales@geotechenv.com website: www.geotechenv.com

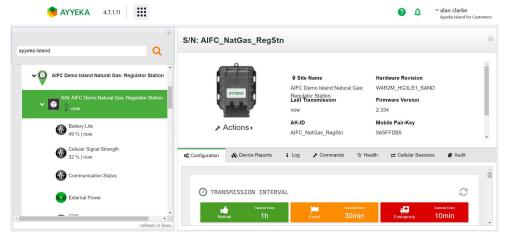


Ayyeka Industrial IoT Devices

Field Asset Intelligence Platform (FAI)

Managing Remote Data & Devices





CALL GEOTECH TODAY

(800) 833-7958

Geotech Environmental Equipment, Inc.

2650 East 40th Avenue • Denver, Colorado 80205 (303) 320-4764 • FAX (303) 322-7242 email: sales@geotechenv.com • website: www.geotechenv.com

- Monitor all devices using a powerful mapping technology that transforms data into meaningful visual insights.
- Intuitive UI providing full control over real time alerts via SMS, email, or phone call, allowing for quicker response for troubleshooting and secures project assets.
- Instant access to remote assets, creating a connected infrastructure with unparalleled ease.
- Support for standard protocols ensures reliable integration in existing systems such as SCADA or business intelligence solutions.
- On-demand oversight over devices ensuring their configurations are up to date and firmware remains current.



Ayyeka Industrial IoT Devices

		Wavelet 4R	Wavelet V2	Wavelet Ex V2
Data & Software	Data Hosting	Cloud or on-premises	Cloud or on-premises	Cloud or on-premises
	Cyber-security	TLS 1.3 Protocol (AES-256)	TLS 1.3 Protocol (AES-256)	TLS 1.3 Protocol (AES-256)
	Software Integration	REST API, CSV	REST API, CSV	REST API, CSV
	SCADA Integration	CSV, DNP3, OPC-UA	CSV, DNP3, OPC-UA	CSV, DNP3, OPC-UA
	IoT Platform Software	Web-base from Wifi Enabled Device	Web-base from Wifi Enabled Device	Web-base from Wifi Enabled Device
	AyyekaGo Mobile App	iOS, Android	iOS, Android	iOS, Android
Data	Data Export Options	CSV, FTP	CSV, FTP	CSV, FTP
	Device Memory	16 MB	8 GB	8 GB
	Data Communication	Bidirectional	Bidirectional	Bidirectional
	Alert Notification	Up to 4 per Data Stream	Up to 4 per Data Stream	Up to 4 per Data Stream
	System Health Check	Included	Included	Included
	Primary Power Supply	Internal Lithium Battery (Field replaceable and non- rechargeable), 3.9 V DC 3A	Internal Lithium Battery (Field replaceable and non- rechargeable), 3.9 V DC 3A	Internal Lithium Battery (Field replaceable and non- rechargeable), 3.9 V DC 3A
Power	Internal Battery Capacity	32 Ah	32 Ah	32 Ah
Po	Battery Life	Up to 10 years (usage dependent)	Up to 10 years (usage dependent)	Up to 5+ years
	Battery Life Notifications	Included	Included	Included
	External Power	6-24VDC automatic power source switching	6-24VDC automatic power source switching	6-12VDC automatic power source switching
	Sensor Connection	Wired with M12 Connectors	Wired with M12 Connectors	Wired with M12 Connectors
	Serial Interfaces	RS485 or RS232 or SDI-12	RS485 or RS232 or SDI-12	RS485 or RS232 or SDI-12
uts	Serial Protocols	Modus, SDI-12, ASCII Text, Custom	Modus, SDI-12, ASCII Text, Custom	Modus, SDI-12, ASCII Text, Custom
Sensor Inputs	Serial Inputs	16	16	16
osua	Analog Inputs	2(4-20 mA, 0-24 V)	4(4-20 mA, 0-24 V)	3(4-20 mA, 0-24 V)
×	Digital Inputs	2 dry contact, open drain Pulse counting: up to 2 at 39Hz max pulse frequency	5 dry contact, open drain Pulse counting: up to 2 at 39Hz max pulse frequency	3 dry contact, open drain Pulse counting: up to 2 at 39Hz max pulse frequency
	Digital Outputs Sensor Power	2 at 0V/2.8V	5 at 0V/2.8V, Up to 3 simultanously	3 at 0V/2.8V
	Supply Output	200mA, 12V or 2.8V	200mA, 12V or 3.6V	12V, 350mA
	Sensor Ports	1 Port; Supports up to 4 sensors using cable splitters	3 Ports; Supports up to 12 sensors using cable splitters	3 Ports; Each accepts serial, analog, and digital inputs
	Cellular/IoT Communication	WA4000-31 (US) - CAT-M WA4000-82 (Global) - C AT-M, NB-IoT, 2G WA4000-61-E (Global) -4G, 3G, 2G	4G/3G/2G	4G/3G/2G
	SIM Card	Single SIM slot, 4FF	Dual SIM slots, 3FF	Dual SIM slots, 3FF
ctivity	Cellular Roaming	Global multi-network SIM(s), data plan included for up to 180+ countries	Global multi-network SIM(s), data plan included for up to 180+ countries	Global multi-network SIM(s), data plan included for up to 180+ countries
Connectivity	Configuration and upgrades	Bluetooth Low Energy (BLE), remotely (over-the-air), USB connection	Bluetooth Low Energy (BLE), remotely (over-the-air), USB connection	Bluetooth Low Energy (BLE), remotely (over-the-air), USB connection
	Data Transmission	Periodic, datadependant	Periodic, data-dependant	Periodic, data-dependant
	Antenna	External antenna	External & Backup antenna	External antenna
	Built-in GPS	n/a	Included	Included
	Dimensions (W x H x D)	13.2 cm x 16.5cm x 7.3cm (5.2 in x 6.5 in x 2.9 in)	13.2 cm x 16.5cm x 7.3cm (5.2 in x 6.5 in x 2.9 in)	13.2 cm x 16.5cm x 7.3cm (5.2 in x 6.5 in x 2.9 in)
Mechanical Enclosure	Weight	0.7kg (1.5 lbs)	0.7kg (1.5 lbs)	1.0 kg (2.2 lbs)
Mect Enct	Enclosure Material	Polycarbonate w/ ABS (UL 94V-0 and UV-Resistant)	Polycarbonate w/ ABS (UL 94V-0 and UV-Resistant)	Polycarbonate w/ ABS (UL 94V-0 and UV-Resistant)
<	Ingress Protection	IP 68/NEMA 6P	IP 68/NEMA 6P	IP 68/NEMA 6P



Ayyeka Industrial IoT Devices

~
=
=
$\overline{}$
ė
2
Ð
9
ج.

ertification

	Wavelet 4R	Wavelet V2	Wavelet Ex V2
Operating Temperature	-40° to - 80°C (-40° to 176°F)	-40° to - 80°C (-40° to 176°F)	-40° to 68°C (-40° to154°F)
Storage Temperature	-40° to 80°C (-40° to 176°F)	-40° to 80°C (-40° to 176°F)	-40° to 80°C (-40° to 176°F)
Data in Transit Security	TLS 1.3 TLS 1.3		TLS 1.3
Device Authentication	Hardware Based	Hardware Based	Hardware Based
Blutooth	ECC key exchange, AES-256 encryption	ECC key exchange, AES-256 encryption	ECC key exchange, AES-256 encryption
Firmware/ Security Updates	Full-over-the-air (FOTA)	Full-over-the-air (FOTA)	Full-over-the-air (FOTA)
Physical Access	Restricted to diagnostics only	Restricted to diagnostics only	
Safety	EN 61010-1 2010 IEC 61010-1	EN 61010-1 2010 EN 61010-1 2010 IEC 61010-1 IEC 61010-1	
FCC	FCC Part 15 Subpart B	FCC Part 15 Subpart B	FCC Part 15 Subpart B
EMC	EN 301 489-1 V2.1.1 2017 EN 301 489-7 V1.3.1 2005	211301105112	EN 301 489-1 V2.1.1 2017 EN 301 489-7 V1.3.1 2005
Spurious Emissions	EN 301 511 V12.5.1 2017	EN 301 511 V12.5.1 2017	EN 301 511 V12.5.1 2017
Radiate Emissions	EN 301 908-1 V11.1.1 2016	EN 301 908-1 V11.1.1 2016	EN 301 908-1 V11.1.1 2016
IP68/NEMA6P	EN 60529:1992+A2:2013 EIC 60529:1989/AM1:1999	EN 60529:1992+A2:2013 EIC 60529:1989/AM1:1999	EN 60529:1992+A2:2013 EIC 60529:1989/AM1:1999
C€	Approved	Approved	Approved

Data Plan Options

Geotech Data Services - Up to 32 Parameters Per Data Transmission

	Basic	Standard	Professional
Transmission Frequency	4 Hours	1 Hour	1 minute
Max Sampling Frequency (per hour)	120	180	500
Multi-carrier Cellular Data Plan	Yes	Yes	Yes
Users	Unlimited	Unlimited	Unlimited
Mobile App for Device Configuration	Yes	Yes	Yes
Data Retention	1 Years	2 Years	3 Years
Free Hibernation Mode		Yes	Yes
Rel-time mode			Yes

CALL GEOTECH TODAY

(800) 833-7958

Geotech Environmental Equipment, Inc.

2650 East 40th Avenue • Denver, Colorado 80205

(303) 320-4764 • FAX (303) 322-7242

email: sales@geotechenv.com • website: www.geotechenv.com