GROUNDWORX®

ENVIRONMENTAL FIRE INTELLIGENCE

PROTOTYPE · UNDER DEVELOPMENT

iQ Fire Station SmartTower

From the air to the ground.

35 elements. One autonomous environmental sensing station.

Air • atmosphere • fuel • soil

FOREST & WILDLAND INTERFACES

8 ft. prototype • two in-ground sensor arrays

5 m soil-array lengths • marked bury line

Air quality & detection — 14

01	Carbon monoxide (CO)	02	Carbon dioxide (CO2)
03	VOCs	04	Nitrogen dioxide (NO2)
05	Ozone (O3)	06	PM1.0
07	PM2.5	08	PM10
09	Optical smoke	10	Photoelectric smoke
11	UV flame response	12	IR flame response
13	Thermal imaging	14	Visible / low-light

Atmospheric — 12

15	Air temperature	16	Relative humidity
17	Wind speed	18	Wind gust
19	Wind direction	20	Solar radiation
21	Precipitation rate	22	Precipitation total
23	Barometric pressure	24	Lightning strikes
25	Lightning distance	26	Ambient light

ET & motion — 2

27	Evapotranspiration	28	Accelerometers

Fuel & site — 3

29	10-hour fuel moisture	30	GPS location
31	Compass heading		

In-ground — 4

32	Temperature	33	Moisture (VWC)
34	Conductivity (EC)	35	Dielectric

35
ELEMENTS

Planned communications & power

Satellite • Starlink gateways • autonomous LTE • LoRaWAN 900 MHz

Meshed network • 228 Ah lithium • no solar required

GAIN

Turn environmental signals into timely action.

Mission-critical autonomous alerts • GAIN intelligence

Prototype under development. Specifications subject to change.

getgroundworx.com/solutions/fire-safety

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