

The Water-Insight Network Gateway (INC) orchestrates radio communications, via a mesh radio network, for up to 1000 IPC sprinkler controllers on a site. It performs essential functions such as automated watering schedule distribution and records the condition of each IPC. Using an industry standard Modbus interface for internet communications the device connects to the Water-Insight cloud-based Irrigation Management System (IMS). IMS provides web-centric remote online management of sprinkler operations via the INC gateway.

Features:

- On screen site condition monitoring and basic analytics
- Automated time synchronization and schedule distribution
- Simple touch screen user interface for IPC status reporting, configuration and control
- Local backup and storage for offline IPC device management
- Digital inputs and outputs (6 each) for pump signaling and control (via IMS only)
- Fault tolerant radio communications over difficult terrain



Item	Parameter	Specification
General		
	Dimensions	Approx. 170 x 120 x 30 mm including side flanges 4 mounting holes to fit M3 fixture
	Weight	650 gm
	Temperature	Operating: 0-65 degrees C Storage: 0-65 degrees C
	Humidity	0 – 90% non-condensing
	Ingress Protection	IP20 Water contact with screen should be avoided.
	Power	Input voltage: 12V +/- 15% Current: 0.25A Max.
	Device Management	Local: Front panel touch screen Web: via Modbus interface
Input/Output		
	Digital Inputs	6 x signal/gnd pairs, switched to gnd Input voltage: 4V max. Input Current: 4 mA gnd inputs are internally tied to power ground
	Digital Outputs	6 x isolated relay output pairs Output voltage: 32V max. Output Current: 2A max
Radio		
	Regulatory	ISM Band, AS/NZS 4268
	Antenna	3dBi/6dBi fibreglass whip
	Operating Frequency	915 – 928 MHz
	Output Power	18 dBm +/- 2 dBm
	Receiver Sensitivity	-121 dBm
	Modulation	GFSK
Communications		
	IMS Interface	USB 2.00 Type B Modbus connection, to host PC
	Ethernet	IEEE 802.3 (connector fitted, for factory use only)
	RS232	RJ45 (connector fitted, for factory use only)
	RS485	RJ11 (connector fitted, for factory use only)
Storage		
	Device management and IPC network configuration	SD Memory Card Secure Digital SDA 2.0