



iNodes from Ferguson Beaugard offers affordable local and remote monitoring of your production assets. Our Concentration & Communications Unit (CCU) delivers periodically collected from the iNode devices to an on-site user or to your office. For local data collection and viewing, the CCU provides a keypad and display. For remote data viewing, the CCU delivers data via either a cellular telephone network or satellite network along with the internet to your office. The CCU is a self-contained battery powered, solar charged system which utilizes a permit free radio system for data communications.

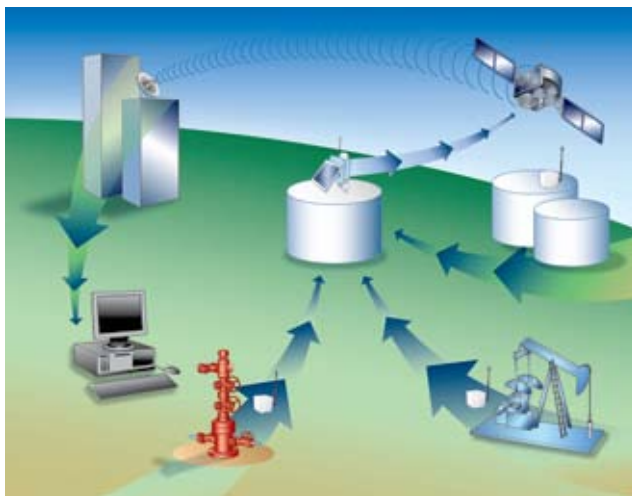
Concentration & Communications Unit (CCU)

The Concentration & Communications Unit is a completely self-contained wireless local area sensor network to wireless wide area network (WAN) bridge and data storage/ processing unit. The Concentration & Communications Unit is the access point to the outside world from the wireless local area sensor network. Essentially, the CCU serves as a hub and “concentrates” information from all iNode sensors at a remote site and relays it through a data processing office for viewing on the Internet.



Features:

- Collects and stores information from local iNodes sensors
- On-board iNodes data storage and processing
- Field configuration, software upgrade and local data retrieval by any iMonitoring-enabled PC, including laptop PCs and PDAs
- Data can be secured by the use of Group IDs and cypher encryption
- Local data viewing with keypad and display or iMonitoring-enabled PC or PDA
- Satellite or cellular network for WAN communications



“Right time” data allows engineering office staff and pumpers to strategically plan daily operations and respond immediately to problems

Technical Specifications

Environmental

Operating Temperature

- Standard: -10°C to +60°C (14°F to +140°F)
- Cold weather option: -40°C to +60°C (-40°F to +140°F)

Storage Temperature

-40°C to +70°C (-40°F to +158°F)

Humidity

5 to 95% RH, non-condensing

Enclosure

- Ingress protection:*
- Meets IEC IP65 (dust and blowing rain)
 - Meets NEMA 4X
- *Enclosure venting:* Standard

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Power	
Source	Solar panel: 5W standard, 10W optional
Storage	Battery: • Type: Rechargeable 12V DC gel lead • Life: > 5 years (typical)
Regulatory Approvals	
Safety	Not rated for hazardous locations
Communications	• CCU to iNodes™: Meets FCC Part 15.247 and Code of Federal Regulations (CFR) 47, Part 15 • CCU to iNodes™: Meets FCC Part 25
Communications	
CCU to iNodes	<ul style="list-style-type: none"> • Protocol: iMonitoring proprietary Frequency Hopping Spread Spectrum (FHSS) • Certifications: FCC Part 15.247, CFR 47 Part 15 • Service: Half-Duplex • Frequency: 902 - 928 MHz • Antenna: User selectable – External fixed or external connector to remote mounted antenna • Range: <ul style="list-style-type: none"> – CCU to iNode Sensor <ul style="list-style-type: none"> · 1,500 feet typical line of sight · Up to 5,000 feet (with optional high gain antennas) – iMonitoring-enabled PC or PDA to CCU: 500 feet
CCU to Data Processing Office	<ul style="list-style-type: none"> • Satellite modem: <ul style="list-style-type: none"> – Frequency: 1,611-1,618 MHz – Service: Simplex (standard) or duplex (future availability) – Globalstar meets FCC Part 25 • Cellular modem: <ul style="list-style-type: none"> – Sierra Wireless Raven

The iNodes™ Suite of Products Include:

- Tank Level Monitor
- Wireless Data Switch
- Electronic Flow Monitor
- Wireless Pressure/Temperature Monitor
- Concentration & Communications Unit
- Concentration & Communications Unit – Remote Terminal Unit
- Compact Flash Radio
- Universal Serial Bus Radio



Contact us today to learn how iNodes Technology can help improve your production performance. Visit our web site—or email us at: Automation@FergusonBeauregard.com