



# iNET300/iNET900 SPECIFICATIONS

## General

**Data Rate:** 256Kbps/512Kbps(iNET300)  
512Kbps/1Mbps(iNET900)  
user configurable air link  
1,200-115.2 bps serial ports

**Frequency Band:**  
336-344 MHz ISM band(iNET300)  
902-928 MHz ISM band(iNET900)

**Spreading Mode:** DTS/FHSS

**Range(iNET300-256Kbps):**  
Typical fixed range:25 miles  
Maximum fixed range:90miles  
Typical mobile range(parked):8miles  
Typical mobile range(moving):5miles

**Range (iNET300-512Kbps):**  
Typical fixed range:15 miles  
Maximum fixed range:25miles

**Range (iNET900-512Kbps):**  
Typical fixed range:25 miles  
Maximum fixed range:90miles  
Typical mobile range(parked):8miles  
Typical mobile range(moving):5miles

**Range (iNET900-1Mbps):**  
Typical fixed range:15 miles  
Maximum fixed range:25miles

**Available Configurations:**  
Access point/remote dual gateway - serial and ethernet

**Remote Ethernet Bridge - Ethernet Only**  
Remote Serial Gateway - serial only  
P21 protected station - tow radios in one chassis(cold stangby)

## Radio

iNET 300

**System Gain:**150dB @ 256 Kbps  
140dB @ 512 Kbps

**Carrier Power:**0.5 to 5 / 5 to 25 watt

**Output Impedance:**50 Ohms

**Occupied Bandwidth:**316.5kHz

**Modulation:**CPFSK(continuous phase FSK)

**Receiver**  
-101dBm @ 256 Kbps with  $10^{-6}$  BER  
-97dBm @ 512 Kbps with  $10^{-6}$  BER

iNET900

**System Gain:**139dB @ 512 Kbps  
134dB @ 1Mbps

**Carrier Power:**0.1 to 1 / 1 to 15 watt

**Output Impedance:**50 Ohms

**Occupied Bandwidth:**600 kHz

**Modulation:**CPFSK(continuous phase FSK)

**Receiver Sensitivity:**  
-97dBm @ 512 Kbps with  $10^{-6}$  BER  
-92dBm @1Mbps with  $10^{-6}$  BER

## Physical Interfaces

**Ethernet:**10BaseT,RJ-45

**Serial:**COM1:RS-232/485/V.24,DB-9F,DCE  
COM2:RS-232/485/V.24,DB-9M,DCE

**Antenna:**TNC connector(female)

**LEDs:**Lan,Com1,Com2,power,link

## Protocols

**Wireless:**CSMA/CA(Collision Avoidance)

**Ethernet:**IEEE 802.3. Ethernet II,Spanning Tree(Bridging),IGMP

**TCP/IP:**DHCP,ICMP,UDP,TCP,ARP,Multicast,SNTP,TFTP

**Serial:**PPP,Encapsulation over IP(tunneling) for serial async multidrop protocols including Modbus.DNP.3.DF1,BSAP

**Optional:**Allen- Bradley EtherNET/IP\* - Modbus/TCP

## Cyber Security Suite,Level 4

**Encryption:**AES-128 with automatic key rotation

**Authentication:**802.1x,RADIUS,EAP/TLS.  
PKI,PAP,CHAP

**Management:**SSL,SSH,HYPS

**Traffic Segregation:**802.1Q VLAN

## Management

HTTP,HTTPS,SSH,TELNET,local console

SNMPv1/v2/v3,MIB II,Enterprise MIB

SYSLOG

NETview MS™

## Environmental

**Temperature:**-40°C to +70°C (-40°F to +158°F)

**Humidity:**95% at 40°C (104°F) non-condensing

## Electrical

iNET 300

**Input Voltage:** 10.5-16Vdc

**Current Consumption(nominal):**

Mode	13.8Vdc
Transmit	1.2A(5W RF Output) 5.0A(25W RF Output)
Receive	203mA

iNET 900

**Input Voltage:** 10.5-30Vdc(1W), 10.5-16Vdc(15W)

**Current Consumption(nominal):**

Mode	13.8Vdc	24Vdc
Transmit	510mA 5.0A(15W RF Output)	290mA(1W)
Receive	200mA	120mA

## Mechanical

**Case Die Cast Aluminum**

**Dimensions:**

iNET 300  
3.8H x 20.3W x 10.2D cm(5W)  
5.0H x 20.3W x 10.2D cm(25W)  
iNET 900  
3.15H x 17.2W x 11.2D cm(1W)  
5.0H x 20.3W x 10.2D cm(15W)

**Weight:**

iNET 300  
1kg(5W),1.2kg(25W)  
iNET 900  
908g(1W),1.2kg(15W)

**Mounting Options.**Flat surface mount brackets.DIN rail,19' rack tray

**P21 Option:**  
Case Steel(rack mountable 2U)  
Dimensions:8.9H x 48.3W x 35.6D cm  
(3.5H x 19W x 14D in)  
Weight:7.6kg,(14.7lbs)with transceivers

## Agency Approvals

FCC Part 15.247

UL/CSA Class 1 Div.2<sup>1</sup>

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