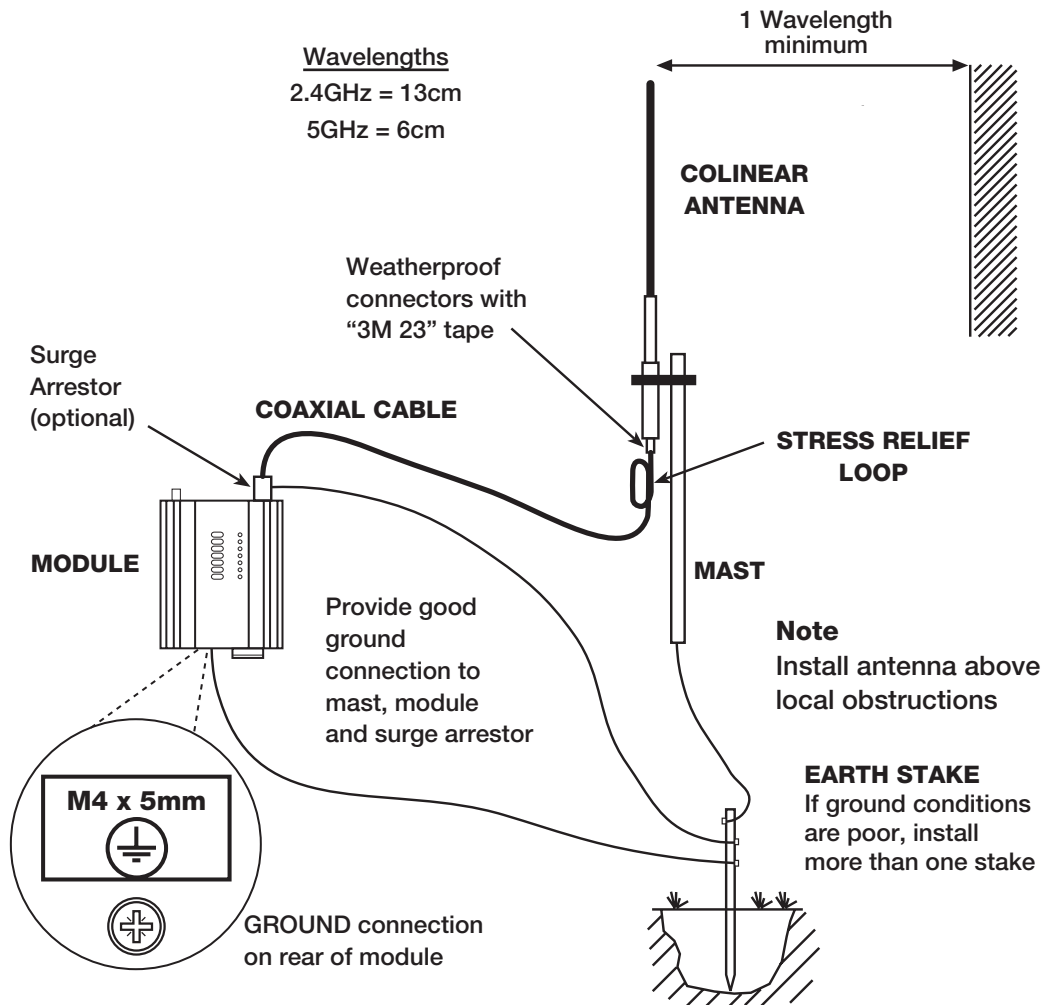# WLN-2000 *Wireless Ethernet* Installation Guide
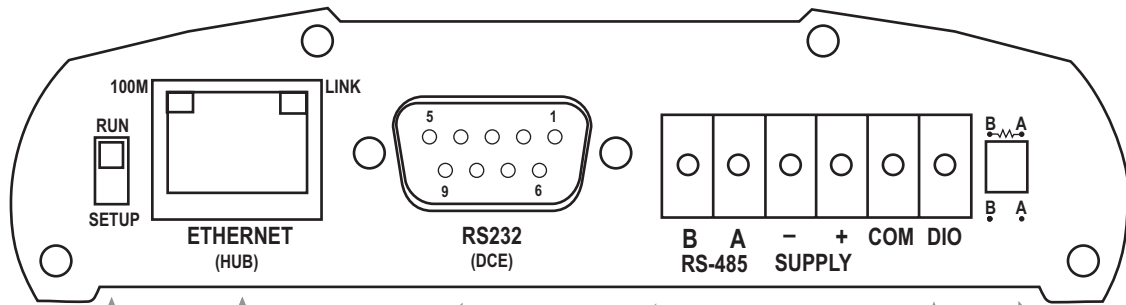
STATUTORY REQUIREMENTS

Local regulations impose limits on the permitted radiated power from unlicensed equipment. A high gain antenna may be used *only* to compensate for cable losses.

Antenna Installation

Wavelengths
2.4GHz = 13cm
5GHz = 6cm

1 Wavelength minimum

COLINEAR ANTENNA

Weatherproof connectors with "3M 23" tape

Surge Arrestor (optional)

COAXIAL CABLE

STRESS RELIEF LOOP

MODULE

MAST

Provide good ground connection to mast, module and surge arrestor

Note
Install antenna above local obstructions

M4 x 5mm

GROUND connection on rear of module

EARTH STAKE
If ground conditions are poor, install more than one stake

NOTES

- All connections must be SELV (Separate Extra Low Voltage <50V AC & < 120V DC)
- Ethernet Port wiring is that of a hub or switch
- Connect "–" terminal to GROUND for surge protection
- Connect M4 screw terminal on rear of module to GROUND for surge protection
- DIO channels can be wired as either inputs or outputs
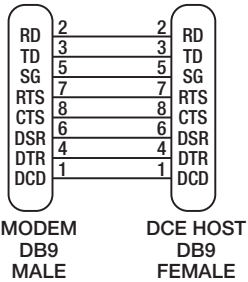- Care must be taken with antenna selection and proximity to the radio

100M · **LINK**

RUN

SETUP

ETHERNET
(HUB)

RS232
(DCE)

5 · 1
9 · 6

B   A   −   +   COM DIO
RS-485   **SUPPLY**

B ⌁ A
B   A

Factory
Default Switch

RJ-45 Ethernet
Connection

RS485 Resistor
Termination
Switch

Connect M4 screw terminalon
rear of module to GROUND for
surge protection

RS232 Connections

PCs

RD	2 — 2	RD
TD	3 — 3	TD
SG	5 — 5	SG
RTS	7 — 7	RTS
CTS	8 — 8	CTS
DSR	6 — 6	DSR
DTR	4 — 4	DTR
DCD	1 — 1	DCD

MODEM   DCE HOST
DB9   DB9
MALE   FEMALE

PLCs, Dataloggers

RD	2	RD
TD	3	TD
SG	5 — 5	SG
RTS	7	RTS
CTS	8	CTS
DSR	6	DSR
DTR	4	DTR
DCD	1	DCD

MODEM   DCE HOST
DB9   DB9
MALE   MALE
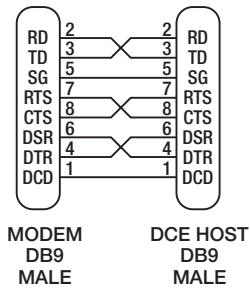
9-30V
DC Supply

+
−

Digital Output Wiring

MODULE

DIO   COM

DC load,
e.g.
relay

Max.
30V DC
0.5A

+   −

RS485 Connections

HOST   HOST

+

−