

F20-PRO Datasheet

Dbii Networks F20-PRO is the world's 1st true integrated Lightning & ESD* protected 802.11b/g 2.4GHz band device with robust surge protection capabilities built-in by default. It employs our patent pending architecture that integrates the protection for the Radio Frequency (RF) antenna port. Power over Ethernet (POE) port can also be protected with the SafeSurge add-on. Its 500mW RF output power and best in class receive sensitivity and gain are designed with long distance outdoor wireless networks in mind. The card is FCC & CE approved.

*Lightning or Surge protection is different than ESD. Other manufacturers might claim both, but they only have ESD protection. Our PRO cards have both built-in

RF Port "Lightning" Protection (Built-in)

ESD Handling		Over 14kV*		
	Surge Handling	8/20uS (10kA)*		

^{*}The miniPCI card should be properly grounded with the supplied cable to achieve this level of protection.

Transmitter Characteristics (Tx)

Data Rate	1Mbps(b)	6Mbps(g)	36Mbps(g)	48Mbps(g	54 Mbps(g
RF Output Power	27 dBm	27 dBm	26 dBm	24 dBm	23dBm
DC Power consumption	4.3 Watts	4.3 Watts	3.4 Watts	3.3 Watts	3.0 Watts

Receiver Characteristics (Rx)

Data Rate	1Mbps(b)	6Mbps(g)	36Mbps(g)	48Mbps(g) 54 Mbps(g
Receiver Sensitivity	-97 dBm	-94 dBm	-83 dBm	-77 dBm	-74dBm
DC Power consumption	1.1 Watts				

Miscellaneous

RF connector	Single MMCX Plug
Dimensions	6 cm X 5.4 cm x 0.73 cm (2.1 inch X 3.0 inch)
Weight	21 grams (0.75 ounces)
Operational Temperature	-40C to +80C
Storage Temerature	-40C to +80C
Humidity	0% to 95% (non-condensing)
MAC chipset Atheros	AR5414 with Turbo Support
Channel width support	5MHz, 10MHz, 20MHz, 40MHz
Data Rates	1/2/5/11 (11b)
	6/9/12/24/36/48/54 Mbps (11g)
Included Accessories	15cm ground wire, 1 screw
Power Offset	8 dBm
Warranty	One Year Limited Warranty



Key Features

- Integrated ESD (14kV) + Lightning Surge Protection (10kA)
- Industrial best sensitivity (-97 dBm @ 6Mbps | -74 dBm @ 54Mbps)
- RF output power up to 27 dBm
- Industry best high rejection filter to improve signal to noise ratio
- Custom built-in heat sink design provides reliable performance