# **F50-PRO** Datasheet



**Dbii Networks F50-PRO** is the world's 1st true integrated Lightning & ESD\* protected 802.11a 5GHz 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.

\*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	6 Mbps	36 Mbps	48 Mbps	54 Mbps
RF Output Power	27 dBm	26 dBm	24 dBm	22 dBm
DC Power consumption	5.3 Watts	5.0 Watts	4.4 Watts	4.1 Watts

#### **Receiver Characteristics (Rx)**

Data Rate	6 Mbps	36 Mbps	48 Mbps	54 Mbps
Receiver Sensitivity	-94 dBm	-83 dBm	-77 dBm	-74 dBm
DC Power consumption	1.1 Watts	1.1 Watts	1.1 Watts	1.1 Watts

#### Miscellaneous

RF connector	Single MMCX Plug
Dimensions	6 cm X 5.4 cm x 0.73 cm
Weight	26 grams (0.9 ounces)
Operational Temperature	-40C to +80C
Storage Temerature	-40C to +80C
Humidity	0% to 95% (non-condensing)
MAC chipset Atheros	AR5414 (6th Generation)
OS Compatibility	Mikrotik, Peplink, Ikarus, Wilibox
SBC Compatibility PC Engines	WRAP, Routerboard, Gateworks
Included Accessories	15cm ground wire, 1 screw
Power Offset	8 dBm
Warranty	One Year Limited Warranty
Frequency Range	5.47GHz – 5.825GHz

#### \*FCC & CE approved, FCC IDs: VKVF50



### **Key Features**

- Integrated ESD (14kV) + Lightning Surge Protection (10kA)
- Industrial best sensitivity (-94 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

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