F50-PRO Datasheet
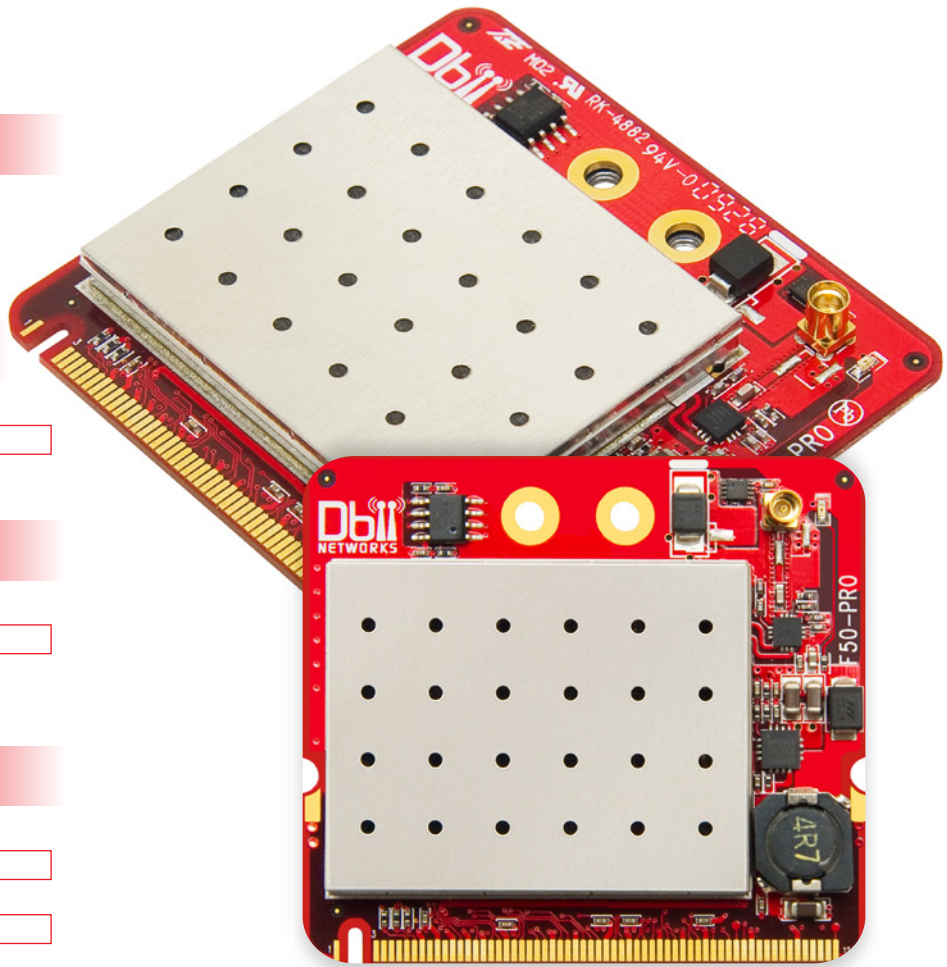
Dbii Networks F50-PRO is the world's 1st true integrated Lightning & ESD* protected 802.11a 4.9GHz/5GHz band device with robust surge protection capabilities built-in by default. It employs our patent pending architecture that integrates the protection for the Radio Frequency (RF) antenna port. Power 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. In the USA, the card is also the 1st to be FCC approved for both in the 4.9GHz public safety band and use in 5GHz band.

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

*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