Deric and Goliaths
By Melanie Liew
Singapore

Wired up regardless. That, in a nutshell, is the charter of local startup RFNet, which designs and develops wired and wireless broadband products that give companies total connectivity.

And if its inaugural product, launched in August this year, is pitted against offerings from networking giants such as Cisco and 3Com, the fledgling company is taking the challenges in its stride.

A spin-off by staff from the Network Technology Research Centre of the Nanyang Technological University (NTU), RFNet designs and develops local area network (LAN) products for the local market and regional market. The company, which was founded in February this year, is located on the University's Innovation Centre.

"We are targeting organisations that want connectivity applications and we are confident that there is a niche for us because the wireless
market is a large one,” said co-founder and managing director Deric Lee.

According to research organisation International Data Corporation, sales of wireless LAN equipment in Singapore will grow five-fold from about US$5 million ($8.85 million) last year to more than US$25 million in 2005.

Meanwhile, Asia Pacific will see growth from US$45 million to US$350 million by 2005.

RFNet's first product, the Wireless LAN Access Point Platinum AP-1002, enables companies and service providers to supply 11Mbps wireless networking services. This will be ramped up to 54Mbps wireless networking services next year.

At a list price of $760, the equipment is also water-resistant and can be deployed up to a range of 2 km.

Its key selling point is its ability to be deployed outdoors effectively, in condominiums, in schools and in -institutions of higher learning.

In this space, it will take on products from the likes of established companies such as Cisco Systems and 3Com. But, Lee remains undaunted. "Although there are already many players in the market, we believe our product will find its niche because of its features and its price."

"We are confident that our offering will do well in the local as well as regional markets. Our value add is that the RFNet Wireless LAN Access Point Platinum AP-1002 has more -features than that of our competitors and will cost about 30 per cent less."

Key to the technology is a credit card-sized card that can be plugged into a laptop or handheld. This transmits information to the access point using radio waves.

At a list price of $230, each access point can connect many computers.

Said Lee, "Although the company became a commercial entity only
eight months ago, we have been involved with wireless research for the last 10 years. This means that we have a strong domain knowledge and experience in this field.

As a student Lee together with his project team, under the tutelage of Associate Professor Law Choi Look, designed and developed a pair of microstrip patch antennae at 1.95GHz. They also designed and implemented a Manchester encoded DPSK transceiver operating at 1.95GHz/1.8GHz to link two wireline IEEE Ethernet networks wirelessly.

"In a sense, RFNet solidifies the many years of the effort," said Lee.

And, apart from hardware, the research team will also pool their collective talent to design handsets, personal digital assistants, mobile phones and other wireless devices for other companies.

Said Lee, "We are also an original design manufacturer. In fact, the design business is our mainstay where we work with companies to customise designs for their products, such as chip sets. This is where the big dollar contracts come from."

The first phase of its marketing efforts will see the company working with distributors in Singapore, Malaysia, Thailand, the Philippines and Indonesia. By the end of the year, territories such as Hong Kong, China and Australia will be included.

Said Lee, "Eventually, we want to be a dominant player in the broadband device market. We work with distributors so that we are able to tap the regional markets. On our own, we will not have the resources to do so. As it is, we are already making good headway as far as our sales efforts are concerned. At this rate, we expect to break even by the first quarter of next year."

"But, if things get worse, then we expect to break even at the end of 2002 or 2003," he added.

RFNet is at [http://www.rfnetech.com](http://www.rfnetech.com).

**RFNet**
Founders: Deric Lee Chyan, Gan Tia Seng, Dai Shaowei, Tan Chin Thong, Associate professors Law Choi Look and Cheng Tee Hiang.

Formed: February 2001

Staff strength: 15

IPO: Not yet

Funding: Private investors

Value proposition: Design and develop wired and wireless broadband products that provide organisations with total connectivity.