CISS, Singapore

The offices and small-parts warehouse for Commercial Industrial Supplies & Services Pte Ltd (CISS) can be found on Guillemard Road in eastern Singapore. A larger warehouse is located somewhat further away from the city. CISS has 20 employees.

Is it possible to sell only 15 satellite dishes a year and still be a market leader? Yes, in Singapore this is possible. CISS is the first place everyone goes when it comes to satellite reception. You could say that the number of installed dishes is actually double that when you take into account the 10 antennas that CISS temporarily set up for the CommunicAsia trade show.

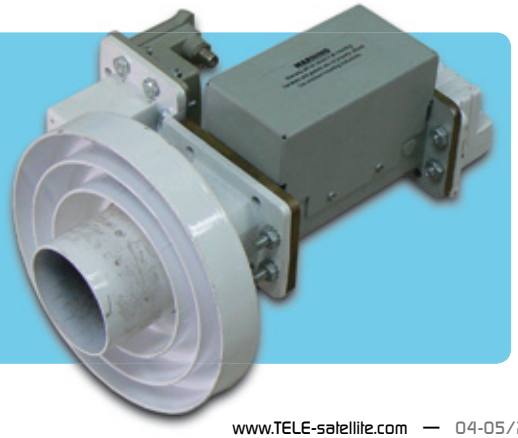
Lim Ee Cheong, Executive Director of CISS, in front of the CATV and MATV parts section in the small-parts warehouse, and holding some multiswitches from WISI in his hand. CISS also stocks products from Alcad, Dynasat and Prodelin.

Lim Ee Cheong, executive director of CISS, explains the reason for this: "Satellite reception is just a niche market here in Singapore." There are several reasons for this: private satellite reception is officially prohibited, "but the government isn't all that strict about this anymore", reveals Lim, "erecting a satellite system for schools and hotels is no longer a problem since they can now freely install a satellite system; even commercial institutions should have no trouble getting the necessary license." A far greater obstacle is their strict adherence to aesthetics: you are highly unlikely to get permission from the housing authority to install a private satellite antenna. And if you look around Singapore you will see that the city is essentially "clean"; you won't see any telephone or electrical cables out in the open.

Singapore has been "cabled" for quite some time now. "The only opportunity for satellite reception may have existed back in the early 90's", comments Lim, "but there are so many channels available via cable today and now IPTV is also becoming a factor." HDTV by itself is no reason for Singaporeans to get more involved with satellite reception since this is already available terrestrially via DVB-T. But Lim identifies another reason for this lack of interest: "There are also technical problems: the Ku-band is very much prone to constant moist heat and the installation of C-band dishes on top of apartment buildings is also problematic due in large part to the wind load."

It is not only the aesthetic requirements that hinder satellite antenna installations; the roofs of the apartment buildings are occupied largely by water storage tanks. Finding room for a satellite dish would be difficult at best. CISS has for quite some time expanded in other directions such as the cabling of residential areas. They have also become involved in video conferencing and training. CISS, founded in 1972, constructed an antenna farm in 1996 for Singtel, Singapore's telephone company, and also erected the receiving antennas for the cable company MITV in Malaysia so that TV signals could be distributed in their cable network.

The future according to Lim will still be in the professional niche market and includes the construction of the communications infrastructure on oil drilling platforms. He does not see that this future will include private satellite reception in Singapore.



An extremely large problem in Singapore is interference from radar stations. Since most of the dishes are installed on the roofs of apartment buildings in full view of all this interference, they manage to receive a wide variety of secondary signals such as terrestrial transmissions and also transmissions from the many ships in the South China Sea and the Straits of Malacca. CISS offers band filters in order to eliminate these interference signals. It is the gray block between the LNB and feedhorn.