1. SYSTEM DESCRIPTION

NKE-2063 Type of Unit: Scanner unit The MTR is installed within a 3.9 feet scanner unit. The scanner weight is approximately 21 kg. The antenna is rotated 16, 17.4, 19, 20.6, 22.2, 23.8, 25.4 and 27rpm by its driving motor. This has a 2 degrees horizontal beam width and 30 degrees for vertical. The transmitter operates with 7-pulse length and 6-pulse repetition frequencies. The magnetron, MSF1422B, rated output is 6kw and is driven by solid-state modulator. The receiver has a microwave front end, containing the low noise amplifier, mixer, local oscillator, IF amplifier and detector.

NKE-2063HS The antenna is rotated 27, 36, 48rpm by its
driving motor. The other contents are the same as NKE-2063

GENERAL SPECIFICATION

1. Dimensions:	Height: 419.5mm, Swing circle: 1220mm
2. Mass:	Approx. 21kg
3. Polarization:	Horizontal
4. Beam width	
Horizontal (-3dB):	2 degree
Vertical (-3dB):	30 degree
Side lobe level:	Less than -23dB within 10 degree of main beam
	other than -26dB within 10 degree of main beam
5. Rotation speed:	
NKE-2063	16, 17.4, 19, 20.6, 22.2, 23.8, 25.4 and 27rpm
NKE-2063HS	27, 36, 48rpm
6. Frequency:	9410 +/–30MHz
7. Peak Power: (kW)	6kW
8. Peak Power (dBm)	67.8dBm +/– 3dB tolerance

9. Pulse length / Repetition frequency: 0.08us/4000Hz, 0.08us/2250Hz, 0.13us/1700Hz 025us/1700Hz, 0.5us/1200Hz, 0.8us/750Hz, 1.0us/650Hz

10. Modulator: Solid-state modulator

11. Duplexer: Circulator / Diode Limiter

12. Front end module; Built in

13. IF amplifier: Logarithmic amplifier, Noise figure 6dB maximum.

14. Tuning: Manual / Auto