

# NITRA-TALL-V-G

The following features make these probes unique for biological applications:

- Extra Tall Tip With High Aspect Ratio : Reduced artifacts when imaging tall biological features
- Integrated Laser Reflecting Pad : For optional gold reflex coating.
- Reduced Thermal Drift : Uncoated probes are not affected with thermal drift ( bimorph effect) when imaging in liquid. This facilitates instant imaging without waiting to stabilize the probe in the solution.
- Chemical Functionalization: The silicon nitride material on the tips can be conveniently functionalized

## Tip Specifications

- **Coating:** None
- **Material:** Silicon Nitride
- **Shape:** Tetrahedral
- **Height ( $\mu\text{m}$ ):** 14-16
- **ROC (nm) :** <30

## Cantilever Specifications

Material: Silicon  
Nitride  
Shape :V-Shape  
Reflex  
coating :None

Parameter	Nominal	Min	Max	Cantilever
k (N/m)	0.162	0.080	0.321	A
f (kHz)	37.0	27.0	51.0	A
Length ( $\mu\text{m}$ )	105.0	95.0	115.0	A
Width ( $\mu\text{m}$ )	15.0	13.0	17.0	A
Thickness ( $\mu\text{m}$ )	0.55	0.50	0.60	A
k (N/m)	0.029	0.017	0.048	B
f (kHz)	12.0	10.0	15.0	B
Length ( $\mu\text{m}$ )	205.0	195.0	215.0	B
Width ( $\mu\text{m}$ )	20.0	18.0	22.0	B
Thickness ( $\mu\text{m}$ )	0.55	0.50	0.60	B
k (N/m)	0.237	0.123	0.453	C
f (kHz)	41.0	30.0	55.0	C
Length ( $\mu\text{m}$ )	105.0	95.0	115.0	C
Width ( $\mu\text{m}$ )	22.0	20.0	24.0	C
Thickness ( $\mu\text{m}$ )	0.55	0.50	0.60	C
k (N/m)	0.058	0.041	0.092	D
f (kHz)	13.0	12.0	16.0	D
Length ( $\mu\text{m}$ )	205.0	195.0	215.0	D
Width ( $\mu\text{m}$ )	40.0	38.0	42.0	D
Thickness ( $\mu\text{m}$ )	0.55	0.50	0.60	D