

BPM parameters in Wide Band and in MI-31

| Parameter | Measured in Wide Band | Needed in MI-31 | Comments |
|---|--|----------------------|--|
| Noise, $\sigma(\mu\text{m})$ | 3(DC + mod.) 100 (pulse) | Same+20 in pbar mode | Can be decreased by averaging |
| Difference between modes, μm | ≤ 40 (DC vs pulse) | 20 (DC vs pbar) | Very difficult to check by beam measurements |
| Linearity, μm | < 20 at shifts of 1.5 mm | 10 at shifts of 4 mm | For optics measurements |
| Amplitude dependence | $< 50 \mu\text{m}$ (DC, 300-1300 int.) | 20 | For DC vs pbar comparison |
| Position vs time | 1 Hz all; 5-500 Hz single channel | 1Hz – 500 kHz | Optional output for oscilloscope |
| Mechanical BPM alignment | 4 mm ? | 1 mm | |