

7 DIRECTIONS FOR USE: INTERPRETATION OF TEST RESULTS

REQUIRED ACQUISITION PARAMETERS BY SCANNER TYPE –

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Manufacturer/Field Strength	Philips 1.5T	Philips 3.0T	Siemens 3.0T	GE 1.5T	GE 3.0T	Siemens 1.5T
Scanner Models	Achieva, Ingenia	Achieva, Ingenia, Intera	Magnetom Vida, Skyra, TrioTim, Verio, Vida, Lumina	Signa HDxt, Optima MR450w	Discovery 750w	Espreo, Essenza, Avanto, Aera, Sempa, Altea, Sola
T2W						
Repetition Time (ms)	2975 [2650-6869]	4434 [3752-6435]	4780 [3000-10500]	2975 [2650-6869]	9999 [1500-13599]	4780 [3000-10500]
Echo Time (ms)	125 [120-130]	120	121 [97-123]	96 [91-118]	109 [102-115]	121 [97-123]
Flip Angle (degrees)	90	90	137 [120-160]	90 [90-160]	160 [90-160]	137 [120-160]
Slice thickness (ST-mm)	4.0 [3.0, 4.6]	3.0	3.0 [3.0-3.8]	3.5 [3.5-4.0]	4.0	4.0 [4.0-4.6]
Max Gap (skip) + ST*	5 mm	5 mm	5 mm	5 mm	5 mm	5 mm
Square matrix size (pixels)	512 [512-672]	512 [512-576]	320 [320-640]	512	512	320 [320-640]
In-plane field of view (mm)	200 [160-246]	140 [140-180]	200 [140-220]	200 [180-260]	200 [200-220]	200 [140-260]
In-plane resolution (mm)	0.391 [0.297-0.391]	0.273 [0.273-0.321]	0.573 [0.281-0.688]	0.391 [0.352-0.508]	0.391 [0.391-0.430]	0.573 [0.281-0.688]
DWI						
Repetition Time (ms)	3360 [2700-4847]	6804 [4000-7036]	4800 [3900-7600]	6000 [3515-6000]	4000 [2000-4877]	4800 [3900-7600]
Echo Time (ms)	67 [65-81]	52 [51-84]	62 [62-121]	85 [68-87]	72 [68-74]	62 [62-121]
High b-value (s/mm ²)	1400 [1000-1400]	2000 [750-2000]	1500 [800-2000]	1400 [800-1600]	1450 [1150-1450]	1500 [800-2000]
Slice thickness (mm) Skip=0	4.0 [3.3-4.6]	3.0 [3.0-3.3]	3.5 [3.0-4.6]	3.0 [3.0-4.0]	4.0 [4.0-4.2]	4.0 [4.0-4.6]
Square matrix size (pixels)	160 [128-256]	256 [128-256]	118 [96-280]	256	256	118 [96-280]
In-plane field of view (mm)	216 [180-360]	140 [140-180]	200 [169-240]	240 [240-260]	256 [220-256]	200 [169-240]
In-plane resolution (mm)	1.389 [1.216-1.417]	0.547 [0.547-1.406]	1.695 [0.714-2.255]	0.938 [0.938-1.016]	1.000 [0.859-1.000]	1.695 [0.714-2.255]

- **Maximum Gap (skip) < 1.6mm. Slice thickness (ST) + Gap (Skip) must not exceed 5mm.**

Table 9: Required acquisition parameters by MRI scanner type.

Ensure that the scanning technologist selects acquisition parameters that fall within the recommended ranges of parameters in the following Table 9. Specifically, the FOV and matrix selections must fall within the resolution requirements windows provided (highlighted in green). Resolution (mm) is calculated by dividing the FOV (mm) by matrix in the transverse plane.

The final outputs of the software include:

- A segmentation of the whole prostate region.