

NSTX Diagnostic Availability (03/11/7)

Diagnostic	Contact	Phone	Capability	Availability
Bolometer – tangential array	SPaul	3781	Repaired, re-aimed	Start of plasma ops
Bolometer array - divertor	SPaul	3781	4 ch. (unchanged)	Start of plasma ops
CHERS	RBell	3156	51 ch, 10ms (unchanged)	Needs Ne glow calibration; ready for start of ops.
Magnetics - Diamagnetism	MBell	3282		Needs recalibration for new TF; 2/04
Divertor fast camera	RKaita	3275	Tangential divertor view	Will be shipped to PPPL in Dec/Jan.
Dust detector	CSkinner	2214	New	Commission early in run
EBW radiometers	GTaylor	2573	Movable local limiter; oblique view	Needs non-dedicated commissioning time; available mid-run
Edge pressure gauges	HKugel	3146		Start of plasma ops.
Edge rotation spectroscopy	TBiewer	2710		Calibrated and ready for start of plasma ops.; neon calibration desirable mid- and end- run
Edge deposition monitor	CSkinner	2214	Facing & occluded views	Start of plasma ops.
EFIT	SSabbagh	2645	Added rotation and kinetic pressure constraint; ready for MSE and/or “flux surface” constraint	Start of plasma ops. for standard EFIT01 capability; “partial kinetic” and MSE analysis when input data becomes available
Fast camera for RF antenna	TBiewer	2710	New	Start of plasma ops.
Fast lost ion probes - iFLIP	DDarrow	2854		Ready
Fast lost ion probes - sFLIP	DDarrow	2854	New	External work underway, ready by start of ops
Filtered 1D cameras (4)	VSoukhanovskii	2064		Start of plasma ops.
Filterscopes	RMaingi	3176		Start of plasma ops.
FIReTIP	KCLee	3422	4 ch inter/pol (unchanged)	Start of plasma ops.
Gas puff imaging	SZweben	3243		Within 1 st month of operation
Infrared cameras	RMaingi	3176		Replacing power supply; Start of plasma ops.
Interferometer - 1 mm	SKubota	3605	Density and fluctuations	Ready for commissioning at start of ops.
Langmuir probe array	HKugel	3146		Operational but not manned
Magnetics - B coils	JMenard	2037		Need field-only calibration shots
Magnetics - Flux loops	JMenard	2037		Need polarity checks on new SPP loops
Magnetics - Locked modes	JMenard	2037		Need field-only calibration shots
Magnetics - Rogowski coils	JMenard	2037	Compensation to be upgraded	Need field-only calibration shots

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Magnetics - RWM sensors	JMenard	2037	Repaired, upgraded shields	Need field-only calibration shots
Mirnov coils – high frequency	JMenard	2037		Ready; need to test new d/a
Mirnov coils – poloidal array	JMenard	2037		1 month after start of ops.
Mirnov coils – toroidal array	JMenard	2037		Ready; need to test new d/a
MSE	FLevinton	3463	3–4 ch Feb. → 10 ch June	Commissioning from start of NBI; dedicated runtime 1–2 days needed twice
Neutral particle analyzer	SMedley	3274	Additional electrostatic analyzer for 100kHz data	Start of plasma ops. Vertical scanning subject to interference with LPI when deployed
Neutron measurements	DDarrow	2854	Developing prototype collimator	Standard detector recalibrated; ready for ops
PIXCS camera	RKaita	3275	Added translation stage for variable field of view	Reassemble after bakeout; expect to be ready by start of plasma ops.
Plasma TV	SZweben	3243	New filter capability	Start of plasma ops
Reciprocating probe	HKugel	3146	New contoured probe tip	Calibrated and ready 2/04
Reflectometers - Core	SKubota	3605	Phase fluctuations & radial correlations	Start of plasma ops. for standard 3 ch. system; other modes under development or by request
Reflectometer - SOL	wilgenjb@ornl.gov			
RF antenna Langmuir probe	RMaingi	3176	Characterize plasma near antenna elements	Installed but awaiting control unit; expect to commission early in run
SPRED VUV spectrometer	VSoukhanovskii	2064		Start of plasma ops
Thomson scattering	BLeBlanc	2008	20ch, 60Hz (unchanged)	February
Ultrasoft X-ray arrays	DStutman	2560	5 arrays, repaired diodes, reduced vignetting, higher data rate	Operational for start of plasma ops; calibrated data 1 week later
Visible bremsstrahlung det.	VSoukhanovskii	2064		Start of plasma ops
Visible spectrometer (VIPS)	VSoukhanovskii	2064		Start of plasma ops
X-ray crystal spectrometer - H	MBitter	2582	New crystal & detector for T _i profile capability	
X-ray crystal spectrometer - V	MBitter	2582		
X-ray pinhole camera	BStratton	3639	300 frame @ 1MHz	Assembling in lab.; available early '04
X-ray TG spectrometer	DStutman	2560	Awaiting new detector	6 weeks after approval of detector purchase