

QUALITY ASSURANCE REPORT

SIEMENS Sempra

Item NVI- C00533



MANUFACTURER

Siemens

MODALITY

MRI

SYSTEM YOM

2020

QA TYPE

**System
Inspection**

System configuration

Identification, magnet specification and operating data

QA: System Inspection

SYSTEM INFORMATION

Manufacturer	Siemens	Modality	MRI	Model	Sempra
Serial no.	181838	System YOM	2020	Gradient type	XE
No. of channels	16	No. of quenches	0	Fixed or mobile?	Fixed
Upgraded system	No	Year of upgrade	N/A	Base plate	Not included

BASIC MAGNET DETAILS

Magnet type	AX 93	Magnet model no.	10835951
Magnet serial no.	22491891	Magnet YOM	2020

MAGNET OPERATING DATA

Current helium level	577 L / 50%	Magnet pressure	15.50 psiA	Shield temperature	62.6 K
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Recorded helium indication The source QA record states 577 litres and 50% helium level. Both values are retained exactly as recorded.

Cooling, RF and workstation

Major system components and recorded service information

COMPRESSOR / CRYO COOLER

Model no.	F-70 (HV)	Part no.	10121435
Serial no.	FS09496	YOM	2024
Running time	7,762.3 (as recorded)	Pressure level	21 bar - dynamic
Last adsorber service	01 April 2025		

COLDHEAD

Model no.	RDK-408L3	Part no.	1P10613748
Serial no.	SN35L20524C	YOM	2020
Last service	01 March 2020	Temperature	4 K

GRADIENT AND RF SYSTEM

Gradient coil model no.	10840390	Gradient coil part no.	10840390
Body RF transmit coil model	11407692	Body RF transmit coil part	1471

PATIENT TABLE AND MAIN WORKSTATION

Table model no.	10911968	Table serial no.	10790
Table YOM	2020	Extra trolley	No
Positioning pads included	Yes	Main workstation	HP Z440 / 11062060
Workstation serial no.	1040	Software version	XA12E

Licensed software options

Reference screenshots preserved from the source QA inspection

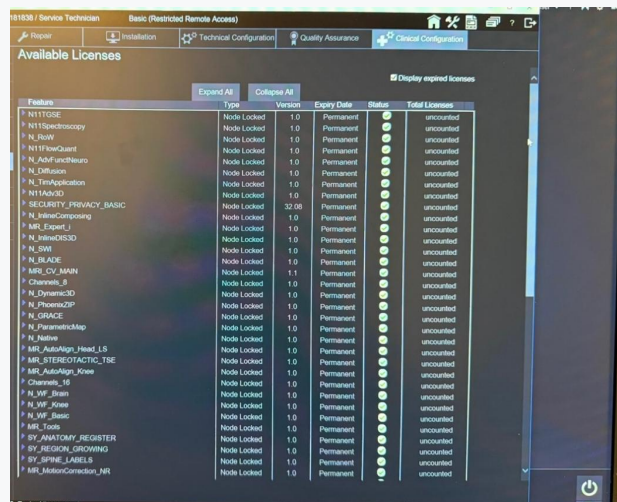
SW version XA12E

Available licenses

The following screenshots document the installed software license view at the time of inspection.

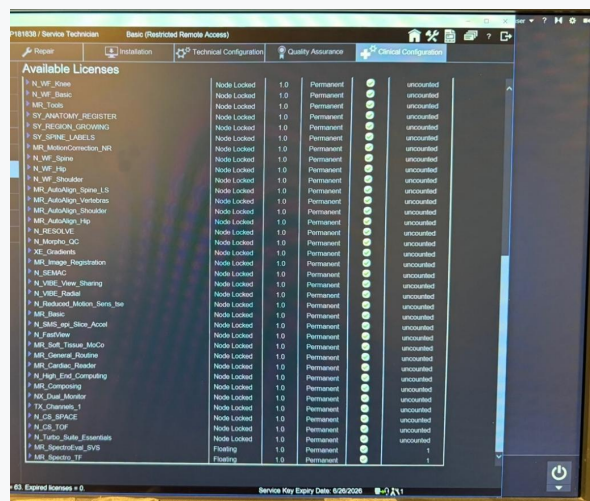
Reference evidence

Licensed feature screenshot 1



Feature	Type	Version	Expiry Date	Status	Total Licenses
N11TQSE	Node Locked	1.0	Permanent	●	uncounted
N11TSpectroscopy	Node Locked	1.0	Permanent	●	uncounted
N_Raw	Node Locked	1.0	Permanent	●	uncounted
N11PawQuant	Node Locked	1.0	Permanent	●	uncounted
N_AdvFuncNeuro	Node Locked	1.0	Permanent	●	uncounted
N_Olfaction	Node Locked	1.0	Permanent	●	uncounted
N_TactApplication	Node Locked	1.0	Permanent	●	uncounted
N11AASD	Node Locked	1.0	Permanent	●	uncounted
SECURITY_PRIVACY_BASIC	Node Locked	32.08	Permanent	●	uncounted
N_IntelCompang	Node Locked	1.0	Permanent	●	uncounted
MR_Epex_I	Node Locked	1.0	Permanent	●	uncounted
N_IntelOESD	Node Locked	1.0	Permanent	●	uncounted
N_SMI	Node Locked	1.0	Permanent	●	uncounted
N_RADE	Node Locked	1.0	Permanent	●	uncounted
MR_CV_MAIN	Node Locked	1.1	Permanent	●	uncounted
Channels_E	Node Locked	1.0	Permanent	●	uncounted
N_DynamicsD	Node Locked	1.0	Permanent	●	uncounted
N_PhomaZIP	Node Locked	1.0	Permanent	●	uncounted
N_GRACE	Node Locked	1.0	Permanent	●	uncounted
N_PneumMap	Node Locked	1.0	Permanent	●	uncounted
N_Nerve	Node Locked	1.0	Permanent	●	uncounted
MR_AutoAlign_Pneal_LS	Node Locked	1.0	Permanent	●	uncounted
MR_STEREOFACTO_TSE	Node Locked	1.0	Permanent	●	uncounted
MR_AutoAlign_Knee	Node Locked	1.0	Permanent	●	uncounted
Channels_16	Node Locked	1.0	Permanent	●	uncounted
N_WF_Shin	Node Locked	1.0	Permanent	●	uncounted
N_WF_Knee	Node Locked	1.0	Permanent	●	uncounted
N_WF_Base	Node Locked	1.0	Permanent	●	uncounted
MR_Eye	Node Locked	1.0	Permanent	●	uncounted
SY_ANATOMY_REGISTER	Node Locked	1.0	Permanent	●	uncounted
SY_REGION_GROWING	Node Locked	1.0	Permanent	●	uncounted
SY_SPINE_LABELS	Node Locked	1.0	Permanent	●	uncounted
MR_MotionConnector_MR	Node Locked	1.0	Permanent	●	uncounted
N_WF_Knee	Node Locked	1.0	Permanent	●	uncounted
N_WF_Shoulder	Node Locked	1.0	Permanent	●	uncounted
MR_AutoAlign_Spine_LS	Node Locked	1.0	Permanent	●	uncounted
MR_AutoAlign_Vertraz	Node Locked	1.0	Permanent	●	uncounted
MR_AutoAlign_Shoulder	Node Locked	1.0	Permanent	●	uncounted
MR_AutoAlign_Hip	Node Locked	1.0	Permanent	●	uncounted
N_BESOLV	Node Locked	1.0	Permanent	●	uncounted
N_Morpho_OC	Node Locked	1.0	Permanent	●	uncounted
MR_Gradient	Node Locked	1.0	Permanent	●	uncounted
MR_ImageRegistration	Node Locked	1.0	Permanent	●	uncounted
N_SEMAC	Node Locked	1.0	Permanent	●	uncounted
N_VMC_View_Sharing	Node Locked	1.0	Permanent	●	uncounted
N_VMC_Statist	Node Locked	1.0	Permanent	●	uncounted
N_Robust_Motion_Sens_ba	Node Locked	1.0	Permanent	●	uncounted
MR_Sens	Node Locked	1.0	Permanent	●	uncounted
N_SAR_3D_Scan_Accol	Node Locked	1.0	Permanent	●	uncounted
N_FastView	Node Locked	1.0	Permanent	●	uncounted
MR_Soft_Tissue_Macro	Node Locked	1.0	Permanent	●	uncounted
MR_General_Routine	Node Locked	1.0	Permanent	●	uncounted
MR_Cardiac_Router	Node Locked	1.0	Permanent	●	uncounted
N_Hip_End_Comparing	Node Locked	1.0	Permanent	●	uncounted
MR_Compassing	Node Locked	1.0	Permanent	●	uncounted
MR_Card_Monitor	Node Locked	1.0	Permanent	●	uncounted
N_Channel_1	Node Locked	1.0	Permanent	●	uncounted
N_CS_SPACE	Node Locked	1.0	Permanent	●	uncounted
N_CS_TOP	Node Locked	1.0	Permanent	●	uncounted
N_Tuber_Rule_Essentials	Node Locked	1.0	Permanent	●	uncounted
MR_Spectroval_SVS	Floting	1.0	Permanent	●	1
MR_Spectro_1P	Floting	1.0	Permanent	●	1

Licensed feature screenshot 2



Feature	Type	Version	Expiry Date	Status	Total Licenses
N_WF_Knee	Node Locked	1.0	Permanent	●	uncounted
N_WF_Base	Node Locked	1.0	Permanent	●	uncounted
MR_Eye	Node Locked	1.0	Permanent	●	uncounted
SY_ANATOMY_REGISTER	Node Locked	1.0	Permanent	●	uncounted
SY_REGION_GROWING	Node Locked	1.0	Permanent	●	uncounted
SY_SPINE_LABELS	Node Locked	1.0	Permanent	●	uncounted
MR_MotionConnector_MR	Node Locked	1.0	Permanent	●	uncounted
N_WF_Knee	Node Locked	1.0	Permanent	●	uncounted
N_WF_Shoulder	Node Locked	1.0	Permanent	●	uncounted
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MR_AutoAlign_Vertraz	Node Locked	1.0	Permanent	●	uncounted
MR_AutoAlign_Shoulder	Node Locked	1.0	Permanent	●	uncounted
MR_AutoAlign_Hip	Node Locked	1.0	Permanent	●	uncounted
N_BESOLV	Node Locked	1.0	Permanent	●	uncounted
N_Morpho_OC	Node Locked	1.0	Permanent	●	uncounted
MR_Gradient	Node Locked	1.0	Permanent	●	uncounted
MR_ImageRegistration	Node Locked	1.0	Permanent	●	uncounted
N_SEMAC	Node Locked	1.0	Permanent	●	uncounted
N_VMC_View_Sharing	Node Locked	1.0	Permanent	●	uncounted
N_VMC_Statist	Node Locked	1.0	Permanent	●	uncounted
N_Robust_Motion_Sens_ba	Node Locked	1.0	Permanent	●	uncounted
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N_SAR_3D_Scan_Accol	Node Locked	1.0	Permanent	●	uncounted
N_FastView	Node Locked	1.0	Permanent	●	uncounted
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MR_General_Routine	Node Locked	1.0	Permanent	●	uncounted
MR_Cardiac_Router	Node Locked	1.0	Permanent	●	uncounted
N_Hip_End_Comparing	Node Locked	1.0	Permanent	●	uncounted
MR_Compassing	Node Locked	1.0	Permanent	●	uncounted
MR_Card_Monitor	Node Locked	1.0	Permanent	●	uncounted
N_Channel_1	Node Locked	1.0	Permanent	●	uncounted
N_CS_SPACE	Node Locked	1.0	Permanent	●	uncounted
N_CS_TOP	Node Locked	1.0	Permanent	●	uncounted
N_Tuber_Rule_Essentials	Node Locked	1.0	Permanent	●	uncounted
MR_Spectroval_SVS	Floting	1.0	Permanent	●	1
MR_Spectro_1P	Floting	1.0	Permanent	●	1

Accessories, condition and coils

Recorded included materials and QA results for receive coils

ACCESSORIES AND DOCUMENTATION

Software discs Yes

System operator manuals No

System logbook present No

Date of last PM Unknown

MAINTENANCE AND CONDITION

FUNCTIONAL CONDITION

YES

Inspection note

Extremity coil has heavy wear signs and its shock indicator is triggered. No breakage was reported and the coil passed functional QA.

COILS AND QA TEST RESULTS

#	Coil / channels	Model no.	Serial no.	YOM	Result
1	Extremity 12	10838420	1513	N/A	PASSED
2	8 Ch Wrist	10939424	1120	N/A	PASSED
3	Spine 18	10838408	2274	N/A	PASSED
4	Shoulder Large 6	1083816	1429	N/A	FAILED
5	Shoulder Small 6	10838318	1421	N/A	PASSED
6	Body 6	10837358	3949	N/A	PASSED
7	Flex Small 4	10198866	5503	N/A	PASSED
8	Flex Large 4	10498865	5847	N/A	PASSED
9	Foot Ankle 10	10838426	1169	N/A	PASSED
10	Body 13	10838410	2388	N/A	PASSED
11	HeadNeck 16	10837356	5232	N/A	PASSED
12	Flex Coil Interface	10500085	8200	N/A	PASSED

Attention item The Shoulder Large 6-channel coil (serial 1429) failed the recorded QA test and should be reviewed before inclusion in a customer configuration.

Phantoms and QA summary

Test accessories, overall outcome and customer-facing condition summary

PHANTOMS

#	Model name	Model no.	Serial no.	Holder
1	Spherical D240	10496685	28384	Yes
2	Spherical D165	10496625	28047	Yes
3	Bottle 1900	08624186	33156	Yes
4	Bottle 1900	08624186	33157	Yes
5	Foot Ankle 3300	10352484	23363	Yes
6	Bottle 5300	10606530	26392	Yes
7	Wrist 770 ml	10352482	20160	No

37

PASSED TESTS

1

FAILED TEST

38

TOTAL SYSTEM TESTS

KEY INSPECTION FINDINGS

1

System functional: the recorded functional condition is Yes and all main system checks passed.

2

Extremity coil: passed functional QA, but shows heavy wear and a triggered shock indicator.

3

Shoulder Large coil: recorded as failed and requires follow-up before customer delivery.

Report scope

This polished NOVO Imaging report reproduces the technical data and QA outcomes contained in the source inspection record. Commercial configuration and included accessories are governed by the applicable sales order.

System QA testing

General, mechanical and safety checks - tests 1 to 19

18 Passed

1 Failed

#	Performed test	Test result	Reason / note
1	System overall is clean	PASSED	-
2	System shuts down normally without errors (performed by client; error log check)	PASSED	-
3	System boots normally without errors (performed by client; error log check)	PASSED	-
4	No abnormal noise production by system parts	PASSED	-
5	All system monitors, screens and displays function correctly	PASSED	-
6	No fluid leaks	PASSED	-
7	No signs of water leakage in the SEP cabinet	PASSED	-
8	Hydraulic cylinder / spindle inspected for leaks, noise or bearing loss	PASSED	-
9	No system error LEDs lit	PASSED	-
10	No damage to system covers, parts, cables or connectors	PASSED	-
11	No error or warning messages displayed (error log check)	PASSED	-
12	All motorized and manual system movements can be executed	PASSED	-
13	No errors from embedded system diagnostics	PASSED	-
14	No system adjustment values out of specification	PASSED	-
15	All user interfaces, buttons and knobs function correctly	PASSED	-
16	No mechanical damage to moving system parts	PASSED	-
17	All system filters clean	PASSED	-
18	All system cooling fans clean and operational	PASSED	-
19	Tilt and/or shockwatch sensors not triggered	FAILED	Extremity coil

Failed item: Test 19 relates to the triggered shock indicator on the extremity coil. The coil itself is separately recorded as functionally passed, with heavy wear noted.

System QA testing

Calibration, gradient, RF and stability checks - tests 20 to 38

19 Passed

#	Performed test	Test result	Reason / note
20	Spike Check	PASSED	-
21	Synthesizer Check	PASSED	-
22	Stability Check	PASSED	-
23	BC Power Losses Check	PASSED	-
24	Eddy Current Compensation Check	PASSED	-
25	Cross Term Compensation Check	PASSED	-
26	Image Orientation Check	PASSED	-
27	Phantom Shim Check	PASSED	-
28	Gradient Regulator Check	PASSED	-
29	Gradient Delay Check	PASSED	-
30	Gradient Rise Time Check	PASSED	-
31	BC Tuning Test	PASSED	-
32	Feedback Loop Calibration Check	PASSED	-
33	RX Gain Calibration Check	PASSED	-
34	Dynamic Pulse Check	PASSED	-
35	RF Noise Check	PASSED	-
36	Gradient Sensitivity Check	PASSED	-
37	BC Image Check	PASSED	-
38	Long Term Stability Check	PASSED	-



QA sequence completed

All recorded tests from 20 through 38 passed.

END OF REPORT