



Food and Drug Administration
10903 New Hampshire Avenue
Document Control Center – WO66-G609
Silver Spring, MD 20993-0002

GE HEALTHCARE
BRYAN BEHN
SR. REGULATORY AFFAIRS MANAGER
9900 INNOVATION DR.
WAUWATOSA WI 53226

February 26, 2016

Re: K160182
Trade/Device Name: Logiq S7 Expert
Regulation Number: 21 CFR 892.1550
Regulation Name: Ultrasonic pulsed doppler imaging system
Regulatory Class: II
Product Code: IYN, IYO, ITX
Dated: January 20, 2016
Received: January 27, 2016

Dear Mr. Behn:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Industry and Consumer Education at its toll-free number (800) 638 2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. Also, please note the regulation entitled, “Misbranding by reference to premarket notification” (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH’s Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

A handwritten signature in blue ink that reads "Michael D. O'Hara". The signature is written in a cursive style. In the background, there is a faint, large watermark of the letters "FDA" in a stylized font.

For

Robert Ochs
Director
Division of Radiological Health
Office of In Vitro Diagnostics
and Radiological Health
Center for Devices and Radiological Health

Enclosure

Indications for Use

510(k) Number (if known)

K160182

Device Name
LOGIQ S7 Expert

Indications for Use (Describe)

The device is intended for use by a qualified physician for ultrasound evaluation of Obstetrics (Fetal); Abdominal (includes renal, GYN/Pelvic); Pediatric; Small Organ (breast, testes, thyroid); Neonatal Cephalic; Adult Cephalic; Cardiac (adult and pediatric); Peripheral Vascular; Musculo-skeletal Conventional and Superficial; Urology (including prostate); Transrectal; Transvaginal; Transesophageal and Intraoperative (abdominal, thoracic, vascular).

Type of Use (Select one or both, as applicable)

Prescription Use (Part 21 CFR 801 Subpart D)

Over-The-Counter Use (21 CFR 801 Subpart C)

CONTINUE ON A SEPARATE PAGE IF NEEDED.

This section applies only to requirements of the Paperwork Reduction Act of 1995.

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Indications for Use Forms

The following forms represent indications with clinical applications and exam types along with the modes of operation for the LOGIQ S7 Expert system and for all of its probe/mode combinations. Combinations identified by "P" represent those previously cleared with the unmodified LOGIQ S7 Expert (K141261) or on another GE ultrasound system in the case of the probes. "N" is new in this submission. The subject modification does not alter the previously cleared system level indications and clinical applications.



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form
GE LOGIQ S7 Expert Ultrasound System

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]
Ophthalmic											
Fetal / Obstetrics ^[7]	P	P	P	P	P	P	P	P	P	P	5,6
Abdominal ^[1]	P	P	P	P	P	P	P	P	P	P	3,5,6
Pediatric	P	P	P	P	P	P	P	P	P	P	3,5,6
Small Organ ^[2]	P	P	P	P	P	P	P	P	P	P	3,5,6
Neonatal Cephalic	P	P	P	P	P	P	P	P	P	P	5,6
Adult Cephalic	P	P	P	P	P	P	P	P	P	P	5,6
Cardiac Adult & Pediatric	P	P	P	P	P	P	P	P	P	P	
Peripheral Vascular	P	P	P	P	P	P	P	P	P	P	3,5,6
Musculo-skeletal Conventional	P	P	P	P	P	P	P	P	P	P	3,5,6
Musculo-skeletal Superficial	P	P	P	P	P	P	P	P	P	P	3,5,6
Other ^[4]	P	P	P	P	P	P	P	P	P	P	3,5,6
<i>Exam Type, Means of Access</i>											
Transesophageal	P	P	P	P	P	P	P	P	P	P	
Transrectal ^[8]	P	P	P	P	P	P	P	P	P	P	3,5,6
Transvaginal	P	P	P	P	P	P	P	P	P	P	3,5,6
Transurethral											
Intraoperative ^[6]	P	P	P	P	P	P	P	P	P	P	3,5,6
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with C1-5-D Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]	P	P	P	P	P	P	P	P	P	P	5,6
Abdominal ^[1]	P	P	P	P	P	P	P	P	P	P	3,5,6
Pediatric	P	P	P	P	P	P	P	P	P	P	3,5,6
Small Organ ^[2]											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult & Pediatric											
Peripheral Vascular	P	P	P	P	P	P	P	P	P	P	3,5,6
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other ^[4]	P	P	P	P	P	P	P	P	P	P	3,5,6
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal ^[8]											
Transvaginal											
Transurethral											
Intraoperative ^[9]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
System provides real-time 3D and 4D acquisition when used with special 4D probes

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with 9L-D Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]	P	P	P		P	P	P	P	P	P	5,6
Abdominal ^[1]	P	P	P		P	P	P	P	P	P	3,5,6
Pediatric	P	P	P		P	P	P	P	P	P	3,5,6
Small Organ ^[2]	P	P	P		P	P	P	P	P	P	3,5,6
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult & Pediatric											
Peripheral Vascular	P	P	P		P	P	P	P	P	P	3,5,6
Musculo-skeletal Conventional	P	P	P		P	P	P	P	P	P	3,5,6
Musculo-skeletal Superficial	P	P	P		P	P	P	P	P	P	3,5,6
Other ^[4]											
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal ^[8]											
Transvaginal											
Transurethral											
Intraoperative ^[6]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
System provides real-time 3D and 4D acquisition when used with special 4D probes

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with ML6-15 Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]											
Abdominal ^[1]											
Pediatric	P	P	P		P	P	P	P	P	P	3,5,6
Small Organ ^[2]	P	P	P		P	P	P	P	P	P	3,5,6
Neonatal Cephalic	P	P	P		P	P	P	P	P	P	
Adult Cephalic											
Cardiac Adult & Pediatric											
Peripheral Vascular	P	P	P		P	P	P	P	P	P	3,5,6
Musculo-skeletal Conventional	P	P	P		P	P	P	P	P	P	3,5,6
Musculo-skeletal Superficial	P	P	P		P	P	P	P	P	P	3,5,6
Other ^[4]											
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal ^[8]											
Transvaginal											
Transurethral											
Intraoperative ^[6]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
System provides real-time 3D and 4D acquisition when used with special 4D probes

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Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with IC5-9-D Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]	P	P	P		P	P	P	P	P	P	5,6
Abdominal ^[1]	P	P	P		P	P	P	P	P	P	
Pediatric											
Small Organ ^[2]											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult & Pediatric											
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other ^[4]	P	P	P		P	P	P	P	P	P	3,5,6
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal ^[8]	P	P	P		P	P	P	P	P	P	3,5,6
Transvaginal	P	P	P		P	P	P	P	P	P	3,5,6
Transurethral											
Intraoperative ^[8]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD. System provides real-time 3D and 4D acquisition when used with special 4D probes

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Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with 3CRF-D Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]	P	P	P		P	P	P	p	P	P	5,6
Abdominal ^[1]	P	P	P		P	P	P	P	P	P	5,6
Pediatric	P	P	P		P	P	P	P	P	P	5,6
Small Organ ^[2]											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult & Pediatric											
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other ^[4]	P	P	P		P	P	P	P	P	P	5,6
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal ^[8]											
Transvaginal											
Transurethral											
Intraoperative ^[6]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with L8-18i-D Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]											
Abdominal ^[1]											
Pediatric	P	P	P		P	P	P	P	P	P	5,6
Small Organ ^[2]	P	P	P		P	P	P	P	P	P	
Neonatal Cephalic	P	P	P		P	P	P	P	P	P	
Adult Cephalic											
Cardiac Adult & Pediatric											
Peripheral Vascular	P	P	P		P	P	P	P	P	P	3,5,6
Musculo-skeletal Conventional	P	P	P		P	P	P	P	P	P	3,5,6
Musculo-skeletal Superficial	P	P	P		P	P	P	P	P	P	3,5,6
Other ^[4]											
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal ^[8]											
Transvaginal											
Transurethral											
Intraoperative ^[8]	P	P	P		P	P	P	P	P	P	3,5,6
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with S4-10-D Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other [Notes]
Ophthalmic											
Fetal / Obstetrics ^[7]	P	P	P	P	P	P	P	P	P	P	5
Abdominal ^[1]	P	P	P	P	P	P	P	P	P	P	5
Pediatric	P	P	P	P	P	P	P	P	P	P	5
Small Organ ^[2]	P	P	P	P	P	P	P	P	P	P	5
Neonatal Cephalic	P	P	P	P	P	P	P	P	P	P	5
Adult Cephalic											
Cardiac Adult & Pediatric	P	P	P	P	P	P	P	P	P	P	
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other ^[4]											
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal ^[8]											
Transvaginal											
Transurethral											
Intraoperative ^[6]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development; GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with P2D Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]											
Abdominal ^[1]											
Pediatric											
Small Organ ^[2]											
Neonatal Cephalic											
Adult Cephalic			P	P							
Cardiac Adult & Pediatric			P	P							
Peripheral Vascular			P	P							
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other ^[4]											
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal ^[8]											
Transvaginal											
Transurethral											
Intraoperative ^[6]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
System provides real-time 3D and 4D acquisition when used with special 4D probes

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with P6D Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]											
Abdominal ^[1]											
Pediatric											
Small Organ ^[2]											
Neonatal Cephalic											
Adult Cephalic			P	P							
Cardiac Adult & Pediatric			P	P							
Peripheral Vascular			P	P							
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other ^[4]											
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal ^[8]											
Transvaginal											
Transurethral											
Intraoperative ^[6]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development; GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
System provides real-time 3D and 4D acquisition when used with special 4D probes

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Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with RAB4-8-D Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]	P	P	P		P	P	P	P	P	P	5,6
Abdominal ^[1]	P	P	P		P	P	P	P	P	P	5,6
Pediatric	P	P	P		P	P	P	P	P	P	5,6
Small Organ ^[2]											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult & Pediatric											
Peripheral Vascular											
Musculo-skeletal Conventional	P	P	P		P	P	P	P	P	P	5,6
Musculo-skeletal Superficial											
Other ^[4]	P	P	P		P	P	P	P	P	P	5,6
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal ^[8]											
Transvaginal											
Transurethral											
Intraoperative ^[8]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
System provides real-time 3D and 4D acquisition when used with special 4D probes

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Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with 11L-D Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]											
Abdominal ^[1]	P	P	P		P	P	P	P	P	P	3,5,6
Pediatric	P	P	P		P	P	P	P	P	P	3,5,6
Small Organ ^[2]	P	P	P		P	P	P	P	P	P	3,5,6
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult & Pediatric											
Peripheral Vascular	P	P	P		P	P	P	P	P	P	3,5,6
Musculo-skeletal Conventional	P	P	P		P	P	P	P	P	P	3,5,6
Musculo-skeletal Superficial	P	P	P		P	P	P	P	P	P	3,5,6
Other ^[4]											
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal ^[8]											
Transvaginal											
Transurethral											
Intraoperative ^[9]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
System provides real-time 3D and 4D acquisition when used with special 4D probes

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Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with 8C Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]											
Abdominal ^[1]	P	P	P		P	P	P	P	P	P	5
Pediatric	P	P	P		P	P	P	P	P	P	5
Small Organ ^[2]	P	P	P		P	P	P	P	P	P	5
Neonatal Cephalic	P	P	P		P	P	P	P	P	P	5
Adult Cephalic											
Cardiac Adult & Pediatric											
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other ^[4]											
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal ^[8]											
Transvaginal											
Transurethral											
Intraoperative ^[6]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
System provides real-time 3D and 4D acquisition when used with special 4D probes

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Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with 3Sp-D Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]	P	P	P	P	P	P	P	P	P	P	5,6
Abdominal ^[1]	P	P	P	P	P	P	P	P	P	P	5,6
Pediatric	P	P	P	P	P	P	P	P	P	P	5,6
Small Organ ^[2]											
Neonatal Cephalic											
Adult Cephalic	P	P	P	P	P	P	P	P	P	P	
Cardiac Adult & Pediatric	P	P	P	P	P	P	P	P	P	P	
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other ^[4]											
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal ^[8]											
Transvaginal											
Transurethral											
Intraoperative ^[8]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
System provides real-time 3D and 4D acquisition when used with special 4D probes

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Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with 6S-D Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]	P	P	P	P	P	P	P	P	P	P	
Abdominal ^[1]	P	P	P	P	P	P	P	P	P	P	
Pediatric	P	P	P	P	P	P	P	P	P	P	
Small Organ ^[2]											
Neonatal Cephalic	P	P	P	P	P	P	P	P	P	P	
Adult Cephalic											
Cardiac Adult & Pediatric	P	P	P	P	P	P	P	P	P	P	
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other ^[4]											
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal ^[8]											
Transvaginal											
Transurethral											
Intraoperative ^[6]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
System provides real-time 3D and 4D acquisition when used with special 4D probes

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Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with RIC5-9-D Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]	P	P	P	P	P	P	P	P	P	P	5,6
Abdominal ^[1]	P	P	P	P	P	P	P	P	P	P	
Pediatric											
Small Organ ^[2]											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult & Pediatric											
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other ^[4]	P	P	P	P	P	P	P	P	P	P	3,5,6
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal ^[8]	P	P	P	P	P	P	P	P	P	P	3,5,6
Transvaginal	P	P	P	P	P	P	P	P	P	P	3,5,6
Transurethral											
Intraoperative ^[6]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
System provides real-time 3D and 4D acquisition when used with special 4D probes

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Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with 10C-D Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]											
Abdominal ^[1]											
Pediatric	P	P	P		P		P	P	P	P	5,6
Small Organ ^[2]											
Neonatal Cephalic	P	P	P		P		P	P	P	P	5,6
Adult Cephalic											
Cardiac Adult & Pediatric	P	P	P		P		P	P	P	P	5,6
Peripheral Vascular	P	P	P		P		P	P	P	P	5,6
Musculo-skeletal Conventional	P	P	P		P		P	P	P	P	5,6
Musculo-skeletal Superficial	P	P	P		P		P	P	P	P	5,6
Other ^[4]											
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal ^[8]											
Transvaginal											
Transurethral											
Intraoperative ^[8]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
System provides real-time 3D and 4D acquisition when used with special 4D probes

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Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with 6Tc-RS Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]											
Abdominal ^[1]											
Pediatric											
Small Organ ^[2]											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult	P	P	P	P	P	P	P	P	P	P	
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other ^[4]											
<i>Exam Type, Means of Access</i>											
Transesophageal	P	P	P	P	P	P	P	P	P	P	
Transrectal ^[8]											
Transvaginal											
Transurethral											
Intraoperative ^[6]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
System provides real-time 3D and 4D acquisition when used with special 4D probes

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Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with BE9CS Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]											
Abdominal ^[1]	P	P	P		P		P	P	P	P	3, 5, 6
Pediatric	P	P	P		P		P	P	P	P	3, 5, 6
Small Organ ^[2]											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult & Pediatric											
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other ^[4]	P	P	P		P		P	P	P	P	3, 5, 6
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal ^[8]	P	P	P		P		P	P	P	P	3, 5, 6
Transvaginal	P	P	P		P		P	P	P	P	3, 5, 6
Transurethral											
Intraoperative ^[8]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
System provides real-time 3D and 4D acquisition when used with special 4D probes

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with L3-12-D Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]	P	P	P		P	P	P	P	P	P	3, 5, 6
Abdominal ^[1]	P	P	P		P	P	P	P	P	P	3, 5, 6
Pediatric	P	P	P		P	P	P	P	P	P	3, 5, 6
Small Organ ^[2]	P	P	P		P	P	P	P	P	P	3, 5, 6
Neonatal Cephalic	N	N	N		N	N	N	N	N	N	3, 5, 6
Adult Cephalic											
Cardiac Adult & Pediatric											
Peripheral Vascular	P	P	P		P	P	P	P	P	P	3, 5, 6
Musculo-skeletal Conventional	P	P	P		P	P	P	P	P	P	3, 5, 6
Musculo-skeletal Superficial	P	P	P		P	P	P	P	P	P	3, 5, 6
Other ^[4]											
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative ^[6]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
System provides real-time 3D and 4D acquisition when used with special 4D probes

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Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)

Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with S1-4-D Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]	P	P	P	P	P	P	P	P	P	P	5, 6
Abdominal ^[1]	P	P	P	P	P	P	P	P	P	P	5, 6
Pediatric	P	P	P	P	P	P	P	P	P	P	5, 6
Small Organ ^[2]											
Neonatal Cephalic											
Adult Cephalic	P	P	P	P	P	P	P	P	P	P	5, 6
Cardiac Adult & Pediatric	P	P	P	P	P	P	P	P	P	P	5, 6
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other ^[4]											
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative ^[8]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
System provides real-time 3D and 4D acquisition when used with special 4D probes

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

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Prescription User (Per 21 CFR 801.109)



GE Healthcare
510(k) Premarket Notification Submission

Diagnostic Ultrasound Indications for Use Form
GE LOGIQ S7 Expert with C1-6-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode of Operation											
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse ⁹	Other [Notes]	
Anatomy/Region of Interest												
Ophthalmic												
Fetal/Obstetrics ^[7]	P*	P*	P*	P*	P*	P*	P*	P*	P*	P*	P*	3, 5, 6
Abdominal ^[1]	P*	P*	P*	P*	P*	P*	P*	P*	P*	P*	P*	3, 5, 6
Pediatric	P*	P*	P*	P*	P*	P*	P*	P*	P*	P*	P*	3, 5, 6
Small Organ ^[2]												
Neonatal Cephalic												
Adult Cephalic												
Cardiac Adult & Pediatric												
Peripheral Vascular	P*	P*	P*	P*	P*	P*	P*	P*	P*	P*	P*	3, 5, 6
Musculo-skeletal Conventional												
Musculo-skeletal Superficial												
Other ^[4]	P*	P*	P*	P*	P*	P*	P*	P*	P*	P*	P*	3, 5, 6
Exam Type, Means of Access												
Transesophageal												
Transrectal												
Transvaginal												
Transurethral												
Intraoperative ^[8]												
Intraoperative Neurological												
Intravascular												
Laparoscopic												

N = new indication; P* = previously cleared by FDA on LOGIQ S8 K152195)

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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Diagnostic Ultrasound Indications for Use Form
GE LOGIQ S7 Expert with C3-10-D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode of Operation											
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse ⁹	Other [Notes]	
Anatomy/Region of Interest												
Ophthalmic												
Fetal/Obstetrics ^[7]												
Abdominal ^[1]												
Pediatric	P*	P*	P*			P*		P*	P*	P*	P*	5
Small Organ ^[2]												
Neonatal Cephalic	P*	P*	P*			P*		P*	P*	P*	P*	5
Adult Cephalic												
Cardiac Adult & Pediatric												
Peripheral Vascular	P*	P*	P*			P*		P*	P*	P*	P*	5
Musculo-skeletal Conventional												
Musculo-skeletal Superficial												
Other ^[4]												
Exam Type, Means of Access												
Transesophageal												
Transrectal												
Transvaginal												
Transurethral												
Intraoperative ^[8]												
Intraoperative Neurological												
Intravascular												
Laparoscopic												

N = new indication; P* = previously cleared by FDA on LOGIQ S8 K152195)

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with BE9CS-D Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]											
Abdominal ^[1]	p*	p*	p*		p*		p*	p*	p*	p*	3, 5, 6
Pediatric	p*	p*	p*		p*		p*	p*	p*	p*	3, 5, 6
Small Organ ^[2]											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult & Pediatric											
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other ^[4]	p*	p*	p*		p*		p*	p*	p*	p*	3, 5, 6
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal ^[8]	p*	p*	p*		p*		p*	p*	p*	p*	3, 5, 6
Transvaginal	p*	p*	p*		p*		p*	p*	p*	p*	3, 5, 6
Transurethral											
Intraoperative ^[6]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P* = previously cleared by FDA on LOGIQ S8 K152195)

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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Prescription User (Per 21 CFR 801.109)



GE Healthcare
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Diagnostic Ultrasound Indications for Use Form
GE LOGIQ S7 Expert with P8D Transducer

Intended Use: Diagnostic Ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse ⁹	Other [Notes]
Anatomy/Region of Interest											
Ophthalmic											
Fetal/Obstetrics ^[7]											
Abdominal ^[1]											
Pediatric											
Small Organ ^[2]											
Neonatal Cephalic											
Adult Cephalic											
Cardiac Adult											
Cardiac Pediatric											
Peripheral Vascular				P*							
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other ^[4]											
Exam Type, Means of Access											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative ^[8]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P* = previously cleared by FDA on LOGIQ S8 K152195)

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
- System provides real-time 3D and 4D acquisition when used with special 4D probes

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Diagnostic Ultrasound Indications for Use Form

GE LOGIQ S7 Expert with S2-5-D Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes*	Harmonic Imaging	Coded Pulse	Other (Notes)
Ophthalmic											
Fetal / Obstetrics ^[7]											
Abdominal ^[1]	N	N	N	N	N	N	N	N	N	N	5, 6
Pediatric											
Small Organ ^[2]											
Neonatal Cephalic											
Adult Cephalic	N	N	N	N	N	N	N	N	N	N	5, 6
Cardiac Adult & Pediatric	N	N	N	N	N	N	N	N	N	N	5, 6
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other ^[4]											
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative ^[8]											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA

- Notes:
- [1] Abdominal includes Renal, GYN/Pelvic.
 - [2] Small organ includes breast, testes and thyroid
 - [3] Elastography Imaging - Elasticity.
 - [4] Other use includes Urology/Prostate
 - [5] 3D/4D Imaging mode
 - [6] Needle guidance imaging
 - [7] Includes infertility monitoring of follicle development, GYN
 - [8] Intraoperative includes abdominal, thoracic (cardiac), and vascular (PV)
 - [*] Combined modes are B/M, B/Color M, B/PWD or CWD, B/Color/PWD or CWD, B/Power/PWD.
System provides real-time 3D and 4D acquisition when used with special 4D probes

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510(k) Summary

In accordance with 21 CFR 807.92 the following summary of information is provided:

Date: January 20, 2016

Submitter: GE Healthcare
9900 Innovation Dr
Wauwatosa, WI 53226

Manufacturer: GE Ultrasound Korea, Ltd.
9, Sunhwan-ro 214 beon-gil, Jungwon-gu,
Seongnam-si, Gyeonggi-do, Republic of Korea

Primary Contact Person: Bryan Behn
Sr. Regulatory Affairs Manager
GE Healthcare
T:(414)721-4214
F:(414)918-8275

Secondary Contact Person: Qingmeng Chen
Regulatory Affairs Specialist
GE Healthcare
GE Ultrasound Korea, Ltd.
T: +82 31 740 6307
F: +81-42-6272-2462

Device: Trade Name: LOGIQ S7 Expert

Common/Usual Name: LOGIQ S7 Expert

Classification Names: Class II

Product Code: Ultrasonic Pulsed Doppler Imaging System, 21CFR 892.1550 90-IYN
Ultrasonic Pulsed Echo Imaging System, 21CFR 892.1560, 90-IYO
Diagnostic Ultrasound Transducer, 21 CFR 892.1570, 90-ITX

Predicate Device(s): K141261 LOGIQ S7 Expert Diagnostic Ultrasound System
K152195 LOGIQ S8 Diagnostic Ultrasound System
K141639 Voluson S8 Diagnostic Ultrasound System
K143452 Logiq P9 Diagnostic Ultrasound System

Device Description: The LOGIQ S7 Expert is a full featured, general purpose diagnostic ultrasound system which consists of a mobile console approximately 530mm (Caster), 520mm (Keyboard), 565mm (Monitor) wide, 865mm deep and 1760mm high that provides digital acquisition, processing and display capability. The user interface includes a computer keyboard, specialized



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controls, 10.1-inch LCD touch screen and color 23-inch LCD widescreen monitor.

Intended Use: The device is intended for use by a qualified physician for ultrasound evaluation of Obstetrics (Fetal); Abdominal (includes renal, GYN/Pelvic); Pediatric; Small Organ (breast, testes, thyroid); Neonatal Cephalic; Adult Cephalic; Cardiac (adult and pediatric); Peripheral Vascular; Musculo-skeletal Conventional and Superficial; Urology (including prostate); Transrectal; Transvaginal; Transesophageal and Intraoperative (abdominal, thoracic, vascular).

Technology: The LOGIQ S7 Expert employs the same fundamental scientific technology as its predicate devices

Determination of Substantial Equivalence:

Comparison to Predicate Devices

The following is an overview of the differences between the proposed LOGIQ S7 Expert and the predicate LOGIQ S7 Expert (K141261). The proposed LOGIQ S7 Expert has had several features and probes migrated to it currently cleared on other GE Ultrasound systems.

- The systems are all intended for diagnostic ultrasound imaging and fluid flow analysis.
- The LOGIQ S7 Expert and predicate LOGIQ S7 Expert system have the same clinical intended use.
- The LOGIQ S7 Expert and predicate LOGIQ S7 Expert system have the same imaging modes.
- The systems are manufactured with materials which have been evaluated and found to be safe for the intended use of the device.
- The systems have acoustic power levels which are below the applicable FDA limits.
- The LOGIQ S7 Expert and predicate LOGIQ S7 Expert system have similar capability in terms of performing measurements, capturing digital images, reviewing and reporting studies.
- The LOGIQ S7 and predicate systems have been designed in compliance with approved electrical and physical safety standards.
- The probes in LOGIQ S7 Expert and predicate LOGIQ S7 Expert system are identical except for C1-6-D, C3-10-D, P8D, BE9CS-D which are the same on predicate LOGIQ S8 (K152195); the S2-5-D probe is new and an



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incremental improvement to the existing 3Sp-D probe and is equivalent.

- New software features added to the proposed LOGIQ S7 Expert: STIC and OmniView are the same features cleared on predicate Voluson S8 device (K141639); Cardiac AFI is the same feature cleared on predicate Logiq S8 (K152195); Email2MMS (smart phone solution) is the feature cleared on predicate Logiq P9 (K143452).

Summary of Non-Clinical Tests:

The device has been evaluated for acoustic output, biocompatibility, cleaning and disinfection effectiveness as well as thermal, electrical, electromagnetic, and mechanical safety, and has been found to conform to applicable medical device safety standards. LOGIQ S7 Expert and its applications comply with voluntary standards:

1. AAMI/ANSI ES60601-1, Medical Electrical Equipment – Part 1: General Requirements for Safety
2. IEC60601-1-2, Medical Electrical Equipment – Part 1-2: General Requirements for Safety – Collateral Standard: Electromagnetic Compatibility Requirements and Tests
3. IEC60601-2-37, Medical Electrical Equipment – Part 2-37: Particular Requirements for the Safety of Ultrasonic Medical Diagnostic and Monitoring Equipment
4. NEMA UD 3, Standard for Real Time Display of Thermal and Mechanical Acoustic Output Indices on Diagnostic Ultrasound Equipment
5. ISO10993-1, Biological Evaluation of Medical Devices- Part 1: Evaluation and Testing
6. NEMA UD 2, Acoustic Output Measurement Standard for Diagnostic Ultrasound Equipment
7. ISO14971, Application of risk management to medical devices: Second edition
8. NEMA Digital Imaging and Communications in



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Medicine (DICOM) Set. (Radiology)

The following quality assurance measures are applied to the development of the system:

- Risk Analysis
- Requirements Reviews
- Design Reviews
- Testing on unit level (Module verification)
- Integration testing (System verification)
- Final Acceptance Testing (Validation)
- Performance testing (Verification)
- Safety testing (Verification)

Transducer materials and other patient contact materials are biocompatible.

Summary of Clinical Tests:

The subject of this premarket submission, LOGIQ S7 Expert, did not require clinical studies to support substantial equivalence.

Conclusion: GE Healthcare considers the LOGIQ S7 Expert to be as safe, as effective, and performance is substantially equivalent to the predicate device(s).