

# ***IGEM Standards***

***January 2019***



*Founded 1863  
Royal Charter 1929  
Patron: Her Majesty the Queen*



## ABOUT IGEM STANDARDS

Since the 1960s, IGEM has published technical Standards that are now recognised as trusted industry Standards, used to assist in compliance with national legislation and official approved codes of practice and guidance. IGEM Standards relate to aspects of the Pipelines Safety Regulations; Pressure Systems Safety Regulations; Gas Safety (Management) Regulations; Gas Safety (Installation and Use) Regulations; Dangerous Substances and Explosive Atmospheres Regulations; Reporting of Injuries, Diseases and Dangerous Occurrences Regulations; Building Regulations; Health and Safety at Work etc. Act; Management of Health and Safety at Work Regulations; Pressure Equipment Regulations, Electricity at Work Regulations and so on.

The Standards are drafted by expert Panels representing a cross-section of the relevant parts of the gas industry. Regulatory bodies such as HSE, Ofgem and Gas Safe Register contribute to the drafting process. The drafts are issued to the industry and other stakeholders for review and comment prior to publication and, thus, take into account the sometimes broad range of views on the content. The professional status of IGEM ensures its Standards reflect the best possible levels of safety, practice and quality within reasonable cost.

In general, IGEM Standards and guidance documents do not overlap the scope of British Standards (BS) but they do often mirror the scope of British European Standards (BS EN) adding much more detail in many cases. There is no intent to contradict other such standards, and it is IGEM's policy to ensure this does not occur.

IGEM's Standards and guidance documents are all available in hard copy. IGEM does also offer online access to the standards, the benefits of this service are:

- the Standards are always up to date
- search facility in the Standards is provided
- new publications onto the system are notified on the Home page
- the company does not have to manage a 'library'
- is accessible through the internet, so not confined to the office
- a Help page is provided.

The price of this service is determined by what standards are required, for how many users and for how long (typically terms of 12 months or 3 years are offered).

In order to subscribe to the full service please contact [technical@igem.org.uk](mailto:technical@igem.org.uk) for a quotation.

The scopes for all of the standards are also available on the IGEM website <http://www.igem.org.uk/technical-standards/introduction.aspx>

## ABOUT THIS LIST

The list uses the following terms:

**Edition X** Where an edition number is stated, the previous edition is superseded i.e. is not current and is obsolete.

**Set of Amendments** The edition is issued with separate amendments to bring it up to date. These amendments are issued with every Standard purchased but, where this was purchased prior to issue of amendments, they are available for downloading from the IGEM website ([www.igem.org.uk](http://www.igem.org.uk)) or by email to [technical@igem.org.uk](mailto:technical@igem.org.uk).

**Reprint with Amendments** The edition has been reprinted to contain amendments (and enhancements if applicable). Owners of the previous version of the same edition will have to insert amendments (see above) to bring that version up to date. It is not essential to insert enhancements.

**Nth** Refers to a re-print with enhancements. Previous impressions remain current.

For more information on IGEM Standards, please see our website; [www.igem.org.uk](http://www.igem.org.uk).

## IGEM STANDARDS

ITEM and EDITION	TITLE (COMMUNICATION NO.)	DATE	STANDARD 2019 PRICE £	MEMBER/IA 2019 PRICE £
<b>TRANSMISSION AND DISTRIBUTION</b>				
IGEM/TD/1 Ed 5	Steel pipelines and associated installations for high pressure gas transmission (1735)	2008	320	214
IGEM/TD/1 Ed 5 Amendments	Set of amendments 2009,2010, 2016 (1735) <b>Download at <a href="http://www.igem.org.uk">www.igem.org.uk</a></b>	2016	Free	Free
IGEM/TD/1 Ed 5 with amendments July 2016	Steel pipelines for high pressure gas transmission (1789)	2016	Online Access	Online Access
IGEM/TD/1 Ed 5 Supp 1 Ed 2	Handling, transport and storage of steel pipe, bends and fittings (1825)	2018	81	55
IGEM/TD/2 Ed 2	Assessing the risks from high pressure Natural Gas pipelines (1764)	2013	138	93
IGEM/TD/2 Ed 2 Amendments	Set of Amendments 2015 (1764) <b>Download at <a href="http://www.igem.org.uk">www.igem.org.uk</a></b>	2015	Free	Free
IGEM/TD/2 Ed 2 with amendments July 2015	Assessing the risks from high pressure Natural Gas pipelines (1779)	2015	Online Access	Online Access
IGEM/TD/3 Ed 5	Steel and PE pipelines for gas distribution (1770)	2014	211	141
IGEM/TD/3 Ed 5 Amendments	Set of Amendments 2015(1770) <b>Download at <a href="http://www.igem.org.uk">www.igem.org.uk</a></b>	2015	Free	Free
IGEM/TD/3 Ed 5 with Amendments Oct 2015	Steel and PE pipelines for gas distribution (1780)	2015	Online Access	Online Access
IGEM/TD/4 Ed 4	PE and steel gas services and service pipework (1725)	2007	211	141
IGEM/TD/12 Ed 2 Reprint with Amendments 2012	Pipework stress analysis for gas industry plant (1757)	2012	171	114
IGEM/TD/13 Ed 2	Pressure regulating installations for Natural Gas, Liquefied Petroleum Gas and Liquefied Petroleum Gas/Air (1755)	2011	271	182
IGEM/TD/16	Biomethane injection (1768)	2014	111	74
IGEM/TD/17	Steel and PE pipelines for biogas distribution (1769)	2014	81	54
IGEM/TD/101 Ed 3	Adoption of pipe systems by a GT – management of UIP activities (1802)	2018	103	71
IGEM/TD/102	Competence framework (1761)	2012	103	71
<b>GAS MEASUREMENT</b>				
IGEM/GM/4 Ed 3	Flowmetering practices. Inlet pressure exceeding 38 bar and not exceeding 100 bar (1815)	2018	202	136
IGEM/GM/5 Ed 3	Electronic gas meter volume conversion systems (1730)	2008	128	85
IGEM/GM/6 Ed 2	Non-domestic meter installations. Standard designs (1750)	2011	202	136
IGEM/GM/7A Ed 2	Electrical connections for gas metering equipment (1803)	2018	111	74
IGEM/GM/7B Ed 2	Hazardous area classification for gas metering equipment (1804)	2018	139	93
IGEM/GM/8 Part 1 Ed 2	<b>Non-domestic meter installations.</b> Flow rate exceeding 6 m <sup>3</sup> h <sup>-1</sup> and inlet pressure not exceeding 38 bar Design (1795)	2016	211	141
IGEM/GM/8 Part 2 Ed 2	Locations, housings and compounds (1796)	2016	103	69
IGEM/GM/8 Part 3 Ed 2	Fabrication, installation, testing and commissioning (1797)	2016	128	85
IGEM/GM/8 Part 4 Ed 2	Operation and maintenance (1798)	2016	103	69
IGEM/GM/8 Part 5 Ed 2	Notices and labels (1799)	2016	103	69
IGEM/GM/PRS/1	Meter Installation fittings (1793)	2017	117	77
IGEM/GM/PRS/3	Meter Regulators for gas flow rates not exceeding 6m <sup>3</sup> h <sup>-1</sup> and inlet pressures not exceeding 75 mbar (1805)	2017	78	52
IGEM/GM/PRS/6	Meter connectors (1794)	2016	96	64
IGEM/GM/PRS/28	Medium pressure single-stage regulators for gas flow rates not exceeding 6m <sup>3</sup> h <sup>-1</sup> (1791)	2016	105	70
IGEM/GM/PRS/29	Medium pressure two-stage meter regulators for gas flow rates not exceeding 6m <sup>3</sup> h <sup>-1</sup> (1790)	2016	105	70
IGEM/GM/PRS/33	Meter regulators of nominal diameter 32mm (1 1/4 inch) and not exceeding 150mm (6 inch) and for inlet pressures not exceeding 75 mbar (1792)	2016	75	50
<b>UTILISATION</b>				
IGEM/UP/1 Ed 2 Reprint with Amendments	Strength testing, tightness testing and direct purging of industrial and commercial gas installations (1716)	2005	146	99
IGEM/UP/1 Ed 2 Amendments	Set of amendments 2005 (1683) <b>Download at <a href="http://www.igem.org.uk">www.igem.org.uk</a></b>	2005	Free	Free

<b>IGEM/UP/1A Ed 2 Reprint with Amendments</b>	Strength and tightness testing and direct purging of small low pressure industrial and commercial Natural Gas installations (1717)	2005	117	78
<b>IGEM/UP/1A Ed 2 Amendments</b>	Set of amendments 2005 (1701) <b>Download at <a href="http://www.igem.org.uk">www.igem.org.uk</a></b>	2005	Free	Free

2

<b>IGEM/UP/1B Ed 3</b>	Tightness testing and direct purging of small Liquefied Petroleum Gas/Air, Natural Gas and Liquefied Petroleum Gas installations. (1759). Set of amendments issued 2012	2012	136	90
<b>IGEM/UP/1B Ed 3 Amendments</b>	Set of amendments 2012 (1759) <b>Download at <a href="http://www.igem.org.uk">www.igem.org.uk</a></b>	2012	Free	Free
<b>IGEM/UP/1C</b>	Strength testing, tightness testing and direct purging of Natural Gas and LPG meter installations (1751)	2011	111	74
<b>IGEM/UP/2 Ed 3</b>	Installation pipework on industrial and commercial premises (1771)	2014	265	178
<b>IGEM/UP/3 Ed 3</b>	Gas fuelled spark ignition and dual fuel engines (1781)	2015	128	85
<b>IGEM/UP/4 Ed 4</b>	Commissioning of gas fired plant on industrial and commercial premises (1801)	2016	80	53
<b>IGEM/UP/6 Ed 2</b>	Application of compressors to Natural Gas fuel systems (1741)	2009	128	85
<b>IGEM/UP/7 Ed 2</b>	Gas installations in timber framed and light steel framed buildings (1722). Set of amendments issued 2008	2006	128	85
<b>IGEM/UP/9 Ed 2</b>	Application of Natural Gas and fuel oil systems to gas turbines and supplementary and auxiliary fired burners (1705)	2004	128	85
<b>IGEM/UP/10 Ed 4 with amendments 2017</b>	Installation of flued gas appliances in industrial and commercial premises (1800)	2017	191	128
<b>IGEM/UP/10 Ed 4 Amendments</b>	Set of amendments 2016 (1786) <b>Download at <a href="http://www.igem.org.uk">www.igem.org.uk</a></b>	2017	Free	Free
<b>IGEM/UP/11 Ed 3</b>	Gas installations for educational establishments (1821)	2018	107	72
<b>IGEM/UP/12 Ed 2</b>	Application of burners and controls to gas fired process plant (1778)	2015	182	122
<b>IGEM/UP/12 Ed 2 Amendments</b>	Set of amendments 2009 (1778) <b>Download at <a href="http://www.igem.org.uk">www.igem.org.uk</a></b>	2009	Free	Free
<b>IGEM/UP/16</b>	Design for Natural Gas installations on industrial and commercial premises with respect to hazardous area classification and preparation of risk assessments (1756) Set of amendments issued 2013	2011	128	85
<b>IGEM/UP/16 Amendments</b>	Set of amendments 2013 (1756) <b>Download at <a href="http://www.igem.org.uk">www.igem.org.uk</a></b>	2013	Free	Free
<b>IGEM/UP/17 Edition 2</b>	Shared chimney and flue systems for domestic gas appliances (1826)	2018	136	90
<b>IGEM/UP/18</b>	Gas installations for vehicle repair and body shops (1758)	2012	80	53
<b>IGEM/UP/19</b>	Design and application of interlock devices and associated systems used with gas appliance installations in commercial catering establishments (1777)	2015	111	76
<b>IGEM/UP/19 Amendments</b>	Set of Amendments 2015 (1777)	2015	Free	Free
<b>IGEM/UP/19 with Amendments Jan 2015</b>	Design and application of interlock devices and associated systems used with gas appliance installations in commercial catering establishments (1777)	2015	Online Access	Online Access
<b>IGEM/UP/20</b>	CNG Fuelling Stations (1775)	2014	132	89

### GAS LEGISLATION

<b>IGEM/GL/1 Ed 2</b>	Planning of gas distribution systems of MOP not exceeding 16 bar (1718)	2005	111	74
<b>IGEM/GL/2 Ed 3</b>	Planning of transmission and storage systems operating at pressures exceeding 16 bar (1816)	2018	80	53
<b>IGEM/GL/4 Ed 3</b>	Gas system assets - safety management system (1820)	2018	111	74
<b>IGEM/GL/5 Ed 3</b>	Procedures for managing new works, modifications and repairs (1783)	2015	96	65
<b>IGEM/GL/6 Ed 3</b>	Safe Control of Operations for Gas Networks (1814)	2018	128	86
<b>IGEM/GL/8 Ed 3</b>	Reporting and investigation of gas related-incidents (1776)	2007	128	85
<b>IGEM/GL/9 Ed 2</b>	Guidance for large consumers in dealing with Natural Gas supply emergencies. (1806) <b>Download at <a href="http://www.igem.org.uk">www.igem.org.uk</a></b>	2018	Free	Free

### GENERAL

<b>IGEM/G/0</b>	A Standard for Igem Standards (1782).	2015	Free	Free
<b>IGEM/G/1 Ed 2</b>	Defining the end of the Network, a meter installation and installation pipework (1765). <b>Download at <a href="http://www.igem.org.uk">www.igem.org.uk</a></b>	2013	103	69
<b>IGEM/G/4 Edition 2</b>	Definitions for the gas industry (1763). <b>Download at <a href="http://www.igem.org.uk">www.igem.org.uk</a></b>	2012	Free	Free
<b>IGEM/G/5 Ed 2</b>	Gas installations in multi-occupancy buildings (1762)	2012	178	119
<b>IGEM/G/6</b>	Gas supplies to mobile dwellings (1728)	2009	103	69
<b>IGEM/G/7</b>	Risk assessment techniques (1655)	2016	148	101
<b>IGEM/G/8</b>	Handling, transport and storage of PE pipe and fittings (1749)	2010	103	69
<b>IGEM/G/10</b>	Non-return valves (1785)	2016	77	52

For more information on Igem Standards, please see our website; [www.igem.org.uk](http://www.igem.org.uk).

<b>IGEM/G/11</b>	Gas Industry Unsafe Situations Procedure	2018	Free	Free
<b>SAFETY</b>				
<b>IGEM/SR/4 Ed 3</b>	Variable volume gasholders storing lighter than air gases (1752)	2011	154	103
<b>IGEM/SR/14 Edition 2</b>	Fixed volume storage for lighter than air gases (1742)	2010	128	85
<b>IGEM/SR/15 Ed 5</b>	Integrity of safety-related systems in the gas industry (1746)	2010	139	93
<b>IGEM/SR/15 Ed 5 Amendments</b>	Set of Amendments 2015 (1746) Download at <a href="http://www.igem.org.uk">www.igem.org.uk</a>	2015	Free	Free
<b>IGEM/SR/15 Ed 5 with Amendments Dec 2015</b>	Integrity of safety-related systems in the gas industry (1784)	2015	Online Access	Online Access
<b>IGEM/SR/16 Ed 2</b>	Odorant systems for gas transmission and distribution (1734)	2008	103	69

**3**

<b>IGEM/SR/18 Ed 2</b>	Safe working practices to ensure the integrity of gas pipelines and associated installations (1678)	2002	80	53
<b>IGEM/SR/22 3<sup>rd</sup> Impression</b>	Purging operations for fuel gases in transmission, distribution and storage (1625)	1999	111	76
<b>IGEM/SR/23 2<sup>nd</sup> Impression</b>	Venting of Natural Gas (1623)	1995	111	74
<b>IGEM/SR/25 Ed 2</b>	Hazardous area classification of Natural Gas installations (1748)	2010	224	149
<b>IGEM/SR/25 Amendments</b>	Set of amendments 2013 (1748) Download at <a href="http://www.igem.org.uk">www.igem.org.uk</a>	2013	Free	Free
<b>IGEM/SR/28 Ed 2</b>	Trenchless techniques (1753)	2011	154	103
<b>IGEM/SR/29</b>	Dealing with gas escapes (1760)	2012	103	69

**INDUSTRY GUIDANCE**

<b>IGEM/UP/1101</b>	Guidance on gas installations for the management and staff within educational establishments (1745)	2010	24	16
<b>IGEM/G/101</b>	Onshore natural gas extraction and route to use (1766)	2013	Free	Free
<b>IGEM/IG/1</b>	Standards of training in gas work Download at <a href="http://www.igem.org.uk">www.igem.org.uk</a> (1767)	2014	25	17
<b>IGEM/IG/1 Supp 1</b>	Non Domestic Training Specification (1788) Download at <a href="http://www.igem.org.uk">www.igem.org.uk</a>	2016	25	17
<b>IGEM/IG/2</b>	Catering equipment engineers guide to relevant sections of IGE/UP/19 Download at <a href="http://www.igem.org.uk">www.igem.org.uk</a> (1772)	2014	24	16

**ONSITE GUIDES**

<b>NICEIC</b>	Domestic gas safety onsite guide- part 1 and 2 V4	2015	48	48
<b>NICEIC</b>	Non-Domestic gas safety onsite guide part1 and 2 V5	2015	48	48

**CERTIFICATES OF STRENGTH AND TIGHTNESS TESTING AND DIRECT PURGING TO IGE/UP/1 EDITION 2 AND IGE/UP/1A EDITION 2 (shrink wrapped pads of 25 triplicate certificates)**

<b>StT/UP/1A</b>	Certificate of strength testing for IGE/UP/1A	2004	24	16
<b>TT/UP/1A</b>	Certificate of tightness testing for IGE/UP/1A	2004	24	16
<b>DP/UP/1A</b>	Certificate of direct purging for IGE/UP/1A	2004	24	16
<b>StT/UP/1</b>	Certificate of strength testing for IGE/UP/1	2004	24	16
<b>TT/UP/1</b>	Certificate of tightness testing for IGE/UP/1	2004	24	16
<b>DP/UP/1</b>	Certificate of direct purging for IGE/UP/1	2004	24	16

Ed = Edition.      Imp = Impression.      Supp = Supplement.



## PLACING ORDERS (Subject to availability of the Standard)

Orders can be placed using the following methods:

- Online - [www.igem.org.uk](http://www.igem.org.uk)
- Phone - +44 (0) 1889 561 431
- Email - [igem@yesresponse.co.uk](mailto:igem@yesresponse.co.uk)
- Post - An Order Form is provided below. Postal orders should be sent to IGEN Standards, PO Box 2584, Uttoxeter, ST14 9AB

Payment must be received before goods can be dispatched. Dispatch of goods is normally within 2 working days of payment. The following methods of payment are accepted:

- credit card (MasterCard or Visa).
- cheque sent to the above address. Please mark correspondence "IGEM Standards Sales"
- through bank transfer (overseas customers will incur a charge for this method). Please request this on the Order Form.

The list of Standards (on page 2, 3 and 4) will be updated when amendments and new editions have been issued. Prices are reviewed annually (1<sup>st</sup> January) but IGEN reserves the right to change prices at other times and without notice.

### **ORDER FORM FOR IGEN STANDARD HARDCOPIES**

Standard	Qty	Standard	Qty	Standard	Qty	Standard	Qty
IGEM/TD/1 Ed		IGE/GM/8 Part 4		IGEM/UP/20		IGE/SR/22	
IGEM/TD/1 Ed 5 Supp 1		IGE/GM/8 Part 5		IGEM/UP/1101		IGE/SR/23	
IGEM/TD/2 Ed 2		IGE/UP/1 Ed 2 RWA		IGE/GL/1 Ed 2		IGEM/SR/25 Ed 2	
IGEM/TD/3 Ed 5		IGE/UP/1A Ed 2 RWA		IGE/GL/2 Ed 2		IGEM/SR/28 Ed 2	
IGE/TD/4 Ed 4		IGEM/UP/1B Ed 3		IGEM/GL/4 Ed 2		IGEM/SR/29	
IGE/TD/12 Ed 2 RWA		IGEM/UP/1C		IGE/GL/5 Ed 3		StT/UP/1A	
IGEM/TD/13 Ed 2		IGEM/UP/2 Ed 3		IGEM/GL/6 Ed 2		TT/UP/1A	
IGEM/TD/16		IGEM/UP/3 Ed 3		IGEM/GL/8 Ed 3		DP/UP/1A	
IGEM/TD/17		IGEM/UP/4 Ed 3		IGE/GL/9		StT/UP/1	
IGEM/TD/101 Ed 2		IGEM/UP/6 Ed 3		IGEM/G/1 Ed 2		TT/UP/1	
IGEM/TD/102		IGE/UP/7 Ed 2		IGEM/G/4 Ed 2		DP/UP/1	
IGE/GM/4 Ed 2		IGE/UP/9 Ed 2		IGEM/G/5 Ed 2		IGEM/G/101	
IGEM/GM/5 Ed 3		IGEM/UP/10 Ed 4 RWA		IGEM/G/6		IGEM/IG/1	
IGEM/GM/6 Ed 2		IGEM/UP/11 Ed 2		IGEM/G/7		IGEM/IG/1 Supp 1	
IGEM/GM/7A		IGEM/UP/12 Ed 2		IGEM/G/8		IGEM/IG/2	
IGEM/GM/7B		IGEM/UP/16		IGEM/G/10		IGEM/IG/2	
IGE/GM/8 Part 1		IGEM/UP/17		IGEM/SR/4 Ed 3		NICEIC Domestic on-site	
IGE/GM/8 Part 2 Ed 2		IGEM/UP/18		IGEM/SR/14 Ed 2		id	
IGE/GM/8 Part 3 Ed 2		IGEM/UP/19		IGEM/SR/15 Ed 5		NICEIC Non domestic on-site guide	
IGEM/PRS/28				IGEM/SR/16 Ed 2			
IGEM/PRS/29				IGE/SR/18 Ed 2			
IGEM/PRS/33							

**Credit card orders** - After your order is received, our dispatch team will contact you for card details.

**Cheque payments** – Please make cheque payable to IGEM publications

**Bank transfer** - If you wish to pay via a bank transfer please tick this box

5

For more information on IGEM Standards, please see our website; [www.igem.org.uk](http://www.igem.org.uk).

**ALL Orders:**

Contact Name..... Telephone Number.....

Address to which INVOICE should be sent .....

.....

.....

Address to which ordered goods should be sent (if different from above) .....

.....

.....

Delivery type: (Please indicate the how you wish your order to be delivered)

**UK**     1<sup>st</sup> Class - £5.95     Courier - £10    **Worldwide**     1<sup>st</sup> Class - £9.95     Courier - £48

**Member Discounts:**

Member discounts apply on all Standards. To process member discounts (IGEM Members and Industrial Affiliates) we will need your membership or industrial affiliate number. If no details are entered here, items will be priced at the standard rate.

Industrial Affiliate Number..... Membership Number .....

Name and/or Company .....

**Order Total including delivery £**..... (Prices are on the IGEM standards list page 2 and 3)

*Signature:* ..... *Date:* .....



For more information on IGEM Standards, please see our website; [www.igem.org.uk](http://www.igem.org.uk).

