AMS | Analysen-, Mess- und Systemtechnik

Transmitter for AMS Flue gas probes
AMS 3220

available options:

pneumatic unit for supplying the probes with reference gas and / or calibration gas
automatic calibration by using a pneumatic unit

The Application:

The Transmitter AMS 3220 is the control, evaluation- and supply unit for all AMS Flue gas probes. In combination with the Transmitter AMS 3220 the AMS Flue gas probes are certified by the German TÜV according European and German environmental regulations and fulfils the requirements for QAL 1 according EN 14181 and EN ISO 14956.

The Measuring principle:

The AMS Flue gas probes are equipped with Zircon dioxide sensors with Platinum electrodes which are known for their long life expectancy. The Transmitter AMS 3220 supplies the current for the heater of the Zircon dioxide sensor. To increase the stability of the measuring values AMS regulates the temperature of the Zircon dioxide sensor within tight limits. The Transmitter AMS 3220 monitors continuously the Zircon dioxide sensor in the AMS flue gas probes for accuracy and plausibility.

AMS Analysen-, Mess- und
Systemtechnik GmbH
Industriestraße 9
D-69234 Dielheim

Tel.. +49 6222 788 77 0
Fax. +49 6222 788 77 20
E-Mail: info@ams-dielheim.com
Internet: www.ams-dielheim.com

The Measuring system:

Typically the Transmitter AMS 3220 is mounted into the GRP housing of the pneumatic unit. The Transmitter AMS 3220 is mounted into a wall mounting housing with protection class IP 65 for General applications. For installations in Ex-Zone 1/2 classified areas the Transmitter AMS 3220 is also available in an Ex-d certified housing.
The Transmitter AMS 3220 could be mounted in an optional pneumatic unit. Due to a 6-wire protected cable the Transmitter AMS 3220 is connected to the flue gas probe. Via the cable the probe is supplied with current for the heater of the Zircon dioxide sensor. Another wire transfers the measuring signals of the probe to the Transmitter AMS 3220 for evaluation. The display of the Transmitter shows the actual measuring values, the status signals and other important values such as heater current, offset and possible errors. The oxygen value is provided for further transmission via the potential free analogue signal port and via the digital RS 232 interface. The other values are available via potential free contacts. The calibration of the Zircon dioxide sensor in the flue gas probe can be accessed in the main menu of the Transmitter AMS 3220. During a calibration the analogue signal is “frozen” to the last valid measuring value. The status signal indicates “maintenance”.
For use with the O2 / COe-Flue gas probe the Transmitter AMS 3220 is available as Twin-Version and provides separate measuring signals for the components O2 and Coe.

AMS Analysen-, Mess- und
Systemtechnik GmbH
Industriestraße 9
D-69234 Dielheim

Tel.. +49 6222 788 77 0
Fax. +49 6222 788 77 20
E-Mail: info@ams-dielheim.com
Internet: www.ams-dielheim.com

AMS | Analysen-, Mess- und Systemtechnik

Technical Data

Transmitter	**AMS 3220 Transmitter**
Application	Certified for flue gas applications according
	European and German environmental regulations 13. and 17. BImSchV
Measuring principle	ZrO2 sensor with Pt-electrodes
Probes	AMS 3211-000 / 500 / 600 / 700 / 860 Ex
Measuring range	0 … 25 Vol%
Analogue signal port	(0) 4 … 20 mA or 0 … 10V, galvanically separated
Reproducability	+/- 2 % of the measuring value
Resolution	C(O2) – 0,01 %
T90-Time	< 20 Seconds
Display	2* 20 digit, illuminated LCD display 1. Line: display of concentration in Vol % 2. Line: messages, device status, sensor parameters
Messages	1 System message (measuring value yes / no) max. 2 messages configurable as measuring values
Digital communication	serial interface RS232
Ambient operation temp.	+ 5 °C up to + 45 °C
Power supply	24 / 110 / 230 VAC
Protection / Housing / Dimensions	IP65 / wall mounting housing / ca. 300 x 320 x 130 mm (hxbxt)
Approvals	TÜV certification 936/807023/A of 14.08.2000
Weight	8 kg
Options	pneumatic unit for supplying the probes with reference gas and / or calibration gas automatic calibration by using a pneumatic unit
Version: AMS 3220 E V-2013-07	

Specification subject to change.

AMS Analysen-, Mess- und
Systemtechnik GmbH
Industriestraße 9
D-69234 Dielheim

Tel.. +49 6222 788 77 0
Fax. +49 6222 788 77 20
E-Mail: info@ams-dielheim.com
Internet: www.ams-dielheim.com