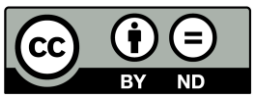
Monitoring Technology Compatibility Assessment

KONICA MINOLTA

Quantitative Optical Gas Imaging (QOGI)
GMP02 and GMP03

Feb-2026



Purpose

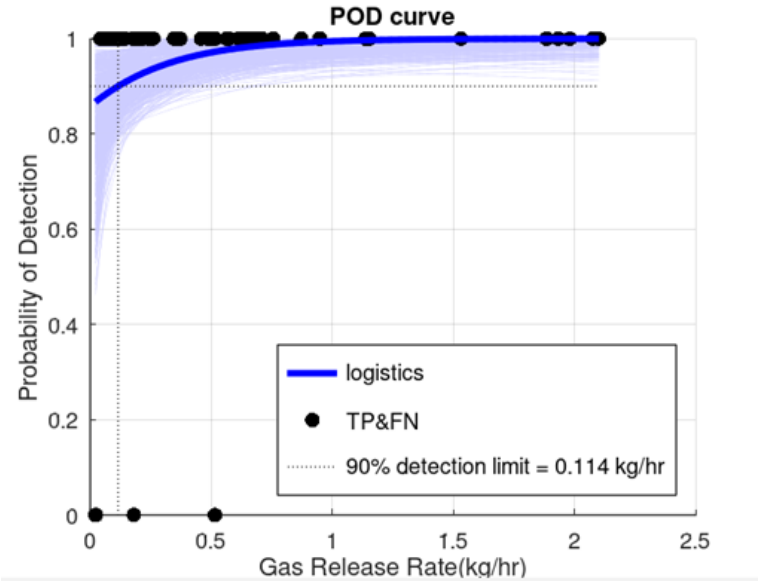
The MiQ Foundation, as the Standard holder, has developed this monitoring technology compatibility assessment to streamline market research conducted by Operators and other stakeholders to assess the compatibility of methane monitoring technologies against the requirements in the Monitoring Technology Deployment pillar of the MiQ Standard.

This document does not endorse or reflect the personal views of the MiQ Foundation and is not intended to be exhaustive. The sole aim of this document is to provide stakeholders with an impartial summary mapping the characteristics of methane monitoring technologies and methods to MiQ requirements. This document does not guarantee that a monitoring technology or method will be compliant for a specific deployment of that technology or method. MiQ Auditors may reference the information in this document while conducting MiQ Audits but still must assess each deployment individually. MiQ encourages Operators to carry out additional independent assessments of technologies and methods for their specific deployments.

MiQ has conducted the following assessment based on best available data, vendor-provided documentation, and published studies at the time of preparation. MiQ reserves the right to make updates to the documentation on a periodic basis to conform with new MiQ Standard updates and updated vendor documentation.

MiQ is not liable for any information provided or technology capabilities guaranteed by the technology provider.

CRITERIA	STANDARD REFERENCE	DESCRIPTION
GENERAL INFORMATION		
Name		Konica Minolta GMP02 and GMP03 Inspection Support Solution. GMP02 and GMP03 are handheld infrared cameras using QOGI (Quantitative Optical Gas Imaging) technology.
MiQ Application	Section 3.2.1	Applicable for both source-level and component level. Supports bottom-up quantification. Suitable for LDAR programs and periodic inspections.
Deployment Method	Section 4.1 – *Table 3 Detection Technology Specification (Bullet 2)*	Operated manually by field personnel. Designed for spot measurements and survey rounds.
Sensor	Section 4.1 – *Table 3 Detection Technology Specification (Bullet 1)*	Infrared sensor detects hydrocarbon gas absorption and visualizes plumes. Quantification is calculated instantly via tablet input (distance, gas type, and temperature).
PERFORMANCE SPECIFICATIONS		
Emission Source Coverage	Section 3.2.1- *Item 1*	GMP02 and GMP03 can detect leaks from valves, flanges, piping, and other components.
Measurement Frequency	Section 3.2.1- *Item 1*	Measurement frequency depends on the operator's schedule, such as monthly or quarterly LDAR rounds. Each inspection can be recorded.
Attribution Level	Section 3.2.1- *Item 4*	GMP02 and GMP03 enable precise detection of gas leaks at the component level. Operators can visually identify the exact source of emissions, such as a leaking valve or flange. This supports detailed equipment-level reporting and facilitates targeted maintenance and repair actions.
Published Test Protocol	Section 4.1 – *Table 3 Detection Technology Specification (Bullet 4)*	2025 METEC ADED survey report: Single-blind controlled testing protocol Note: "ID G" in the report refers to KONICA MINOLTA (GMP02).
MDL @ 90% PoD (Min MiQ MDL requirement is 25kg/hr)	Section 3.2.1- *Item 3*	As shown in PoD curve, MDL at 90% PoD is 0.114 kg/h.

PoD Curve	Section 3.2.1- *Item 3*	 Figure 1: This POD curve was created using experimental data provided by METEC.
TECHNOLOGY LIMITATIONS		
Operational Limitations	Section 4.1 – *Table 3 Detection Technology Specification (Bullet 3)*	GMP02 and GMP03 are capable of detecting emission rates from 1 to 59 g/hr, depending on conditions such as ΔT (temperature difference), distance, and wind speed. It demonstrates high detection performance when ΔT is high, the distance is short, and the wind speed is low. The device complies with the US EPA OOOOa standards and its performance has been verified by an independent third-party organization.
Environmental Limitations	Section 4.1 – *Table 3 Detection Technology Specification (Bullet 3)*	Detection performance is affected by weather (temperature, background, wind direction, etc.). The GMP02 and GMP03 operate between -20°C and +50°C. They are IP54 rated.
EQUIVALENCY DETERMINATION		
Applicability	Section 3.2.3	Typically, not applicable. GMP02 and GMP03, if used to conduct source-level inspections following the Source-level LDAR plan requirements of the Company Practices document may be used to satisfy the source-level inspection requirements for the MiQ Standard.
RECONCILIATION CONDISERATIONS		
Reconciliation	MI Section 3.3 - *Item 4*	Quantitative data from GMP02 and GMP03 are used for source-level quantification and do not assist in emissions reconciliation from facility-scale inspections.
ADDITIONAL DOCUMENTS		

Guides & Whitepapers	The user guide is available online exclusively for customers who have purchased the GMP02 or GMP03. Brochure: “Learn the features, specifications, and customer values of GMP02 and GMP03 in concise brochures for each model” White Paper: “Best Practices for Methane Leak Detection and Emissions Quantification” Link; https://www.konicaminolta.com/us-en/gas/documents/
Case Studies	In actual operating facilities, 21 intentional emissions were quantified using GMP02 and a high-volume sampler to compare accuracy. The results demonstrated a strong correlation between the two methods, with 81% of GMP02 measurements falling within a range of one-half to twice the values obtained by the high-volume sampler. Furthermore, 100% of the measurements were within one-third to three times and one-tenth to ten times the reference values, confirming the high reliability of GMP02 for field quantification.
Add additional, if applicable	
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Document Status

Table: Version History

Version	Date	Summary of Change
1.0		