EMS-CF-WQ-NTU

Turbidity instrument for coolant loops, inline or portable

Optical particulate proxy for the below-1 NTU loop target

A turbidity instrument published as an inline or portable optical unit, policing the below-1 NTU loop target that stands in for suspended particulate. A 0–1000 NTU range is published on a portable unit in this category, and that figure is title-level evidence only, so it is carried here with its qualifier rather than as a verified specification. It exists to show that particulate is rising before a laboratory panel confirms what the particulate is.

ORDERING INFORMATION

Part number	**EMS-CF-WQ-NTU**
Instrument	**Turbidity instrument, inline or portable**
Target band policed	**Below 1 NTU**
Published range, portable unit in this category	**0–1000 NTU (title-level evidence only)**
Measurement basis	**Optical proxy for suspended particulate**
Accuracy	**Open — confirmed at order**
Resolution	**Open — confirmed at order**
Output signal	**Open — confirmed at order**

MEASUREMENT

Parameter	Value	Notes
Target band policed	**Below 1 NTU**	The published loop target for turbidity; it is a particulate proxy, not a particle count
Measurement basis	**Optical proxy for suspended particulate**	Published as the optical route to a particulate reading
Installation options	**Inline or portable**	Inline for trending on the loop, portable for a spot sample
Measuring range, portable unit in this category	**0–1000 NTU**	Title-level evidence only: the range is published on a portable turbidimeter in this category and the page body could not be read, so the figure is carried with this qualifier and confirmed against the supplier document at order
Accuracy	**Open — not published**	The source research publishes no accuracy figure for turbidity; confirmed against the supplier document at order
Resolution	**Open — not published**	Confirmed against the supplier document at order
Calibration interval	**Open — not published**	No interval is published in the source research; confirmed at order

PROCESS AND SIGNAL

Parameter	Value	Notes
Wetted materials	**Open — not published**	Confirmed against the supplier document at order; the wetted path must be compatible with the loop fluid
Process connection	**Open — not published**	Inline mounting arrangement confirmed at order

Parameter	Value	Notes
Output signal	**Open — not published**	Confirmed against the supplier document at order
Protocol	**Open — not published**	Confirmed against the supplier document at order
Supply voltage	**Open — not published**	The source research publishes no supply figure for this instrument; confirmed at order
Ingress protection	**Open — not published**	Confirmed against the supplier document at order

WHERE THE READING SITS AGAINST THE LOOP TARGETS

Parameter	Value	Notes
Turbidity target	**Below 1 NTU**	Particulate proxy; the target applies to the loop fluid, not to a sample left standing
Conductivity band, glycol-premix or facility-water loop	**50–300 µS/cm**	Glycol is a weak electrolyte; the loop type is named because the band does not apply to a de-ionised loop
Conductivity band, de-ionised technology cooling loop	**0.2–20 µS/cm**	A near-DI technology cooling loop with no glycol is held here
pH band, glycol-premix or facility-water loop	**7.0–9.0 pH**	Set by the metallurgy of the loop
pH band, de-ionised technology cooling loop	**8.0–9.5 pH**	The technology cooling side of the ASHRAE split
Classification framework	**ISO 4406**	Developed for hydraulic fluids and applied to coolant loops; a turbidity reading trends the load, and ISO 4406 classifies it
Verification boundary	**Inline and portable readings are trend instruments**	The laboratory panel, every 50–100 days or quarterly, is the reference

APPLICATIONS

- Particulate trend on a secondary loop
- Spot check of a sample drawn hot from the closed loop
- Corroboration of a rising element differential pressure
- Screen before a laboratory panel is drawn

COMPATIBLE PRODUCTS

- EMS-CF-WQ-PC particle counter for the ISO 4406 classification
- EMS-CF-WQ-CI inductive conductivity cell
- EMS-CF-FP-DP element differential-pressure monitor
- EMS-CF-S10 side-stream unit on the same header

WATER-QUALITY INSTRUMENT LADDER

Parameter	Value	Notes
EMS-CF-WQ-C	**Contacting conductivity cell**	0.04–200 µS/cm across the published fine cell constants
EMS-CF-WQ-CI	**Inductive conductivity cell**	Spans both the de-ionised and the glycol-premix or facility-water band
EMS-CF-WQ-PH	**Process pH sensor**	1–12 pH, 0–14 pH and 0–10 pH application variants
EMS-CF-WQ-NTU	**Turbidity instrument**	Polices the below-1 NTU loop target

Parameter	Value	Notes
EMS-CF-WQ-G	**Glycol refractometer**	0.0–90.0% (V/V) with 0.2% (V/V) resolution
EMS-CF-WQ-PC	**Particle counter and contamination monitor**	3-channel measurement to ISO 4406

NOTES

- The 0–1000 NTU range is title-level evidence only and is carried with that qualifier. Every other unsourced row on this datasheet stays open and is confirmed against the supplier document at order.
- Conductivity and pH bands published beside the turbidity row are labelled by loop type: 50–300 µS/cm and pH 7.0–9.0 on a glycol-premix or facility-water loop; 0.2–20 µS/cm and pH 8.0–9.5 on a de-ionised technology cooling loop.
- Turbidity is a proxy for suspended particulate. It does not give a particle count and does not replace ISO 4406 classification or the laboratory panel.
- Inline and portable readings are trend instruments; the laboratory panel every 50–100 days or quarterly is the reference.

Full specification sheet and current pricing
EMS-Trade Cooling · ems-cool.com
Typical lead time confirmed on order acknowledgement.

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