



ACCESSORIES

Take your parSYNC® to the next level by enhancing your emission testing capabilities!

Weather Station + GPS

Designed to seamlessly integrate with the parSYNC®, the 3DATX Scotty is an optional GPS + Weather Station hybrid add-on that will elevate your emissions testing! This powerful accessory is modeled to enhance the evaluation and interpretation of real-time emissions by providing crucial information about ambient weather and geographical location.

Key Features:

- ✔ Global Location Coverage
- ✔ Easy and Secure Magnetic Mounting System
- ✔ High Accuracy Positioning: $\leq 25\text{m}$ Horizontally
- ✔ Fast Update rate: $\leq 10\text{Hz}$
- ✔ Wide Temperature Range: -40°C to 125°C
- ✔ High Accuracy Measurements: $\pm 2\%$ RH and $\pm 0.5^{\circ}\text{C}$ and ± 1.0 hPa for pressure
- ✔ Response Time: < 1 second
- ✔ Power Consumption: $< \mu\text{W}$



OBD Data Logger

The OBD Logger is an optional device used to capture vehicle activity data. This means that vehicle and engine speed, air flow rate, throttle position, lambda, air intake temperature and much more can be captured straight from the vehicle. In-house software is available to time align this data to the parSYNC® emissions data, and then calculate mass-based emission results.

Key Features:

- ✔ Real-time data with 1Hz acquisition frequency
- ✔ Adapter to allow access to both light and heavy-duty vehicles
- ✔ Access to a wide range of different ECU parameters/ On-board diagnostics (OBD)
- ✔ Low vehicle power consumption



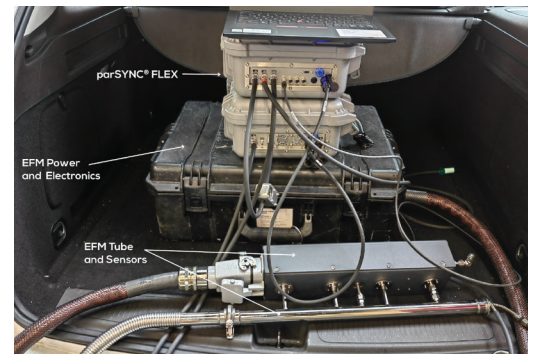
Exhaust Flow Meter (EFM) Adapter

Did you know you can connect a third-party exhaust flow meter to the parSYNC®? This feature means that exhaust flow rate can be incorporated in real-time and used to calculate accurate mass emission rates from the measured concentration values.

Shown here, is a setup combining the FLEX and a third-party EFM.

Key Features:

- ✔ Real-time data at high acquisition frequency
- ✔ Ability to attach any chosen exhaust flow meter, allowing bespoke access to both light and heavy-duty vehicle exhaust flow measurement
- ✔ In-house software allows calculation of mass emission rates



Onboard NH₃ and NO_x Sensor Adapters

Modern diesel vehicles with SCR are equipped with onboard NH₃ and NO_x sensors but their readings are typically unavailable from OBD. parSYNC® users can install similar sensors in a tailpipe extension and directly read concentration data in real-time.

Key Features:

- ✔ Enhance your testing capabilities with minimum effort
- ✔ Pre-configured to work with leading sensor models
- ✔ Custom development options for other models



CAN Port Adapter

Are you ready to make your parSYNC® virtually limitless?

Simply connect a 5-port expansion accessory to one or all the 4 CAN native ports on the parSYNC® iPEMS unit to accommodate up to 20 different sensors or devices. With options like GPS, weather station, thermocouple, and flow meter, your emissions testing possibilities are endless!



Fuel Flow Meter Adapter

Ability to directly measure fuel flow facilitates calculation of mass-based emission rates even when air flow, exhaust flow, or OBD fuel flow are not available. This is valuable addition for any application where OBD is unavailable and EFM is hard to install. We have already integrated Horiba RealFlow and Keyence Micro Flow FD-XS and continue to add more models!

Key Features:

- ✔ Plug&Play compatibility with real-time data at 1 hz
- ✔ User editable config files to match meter settings
- ✔ Custom development options to integrate any user choice fuel flow meter

