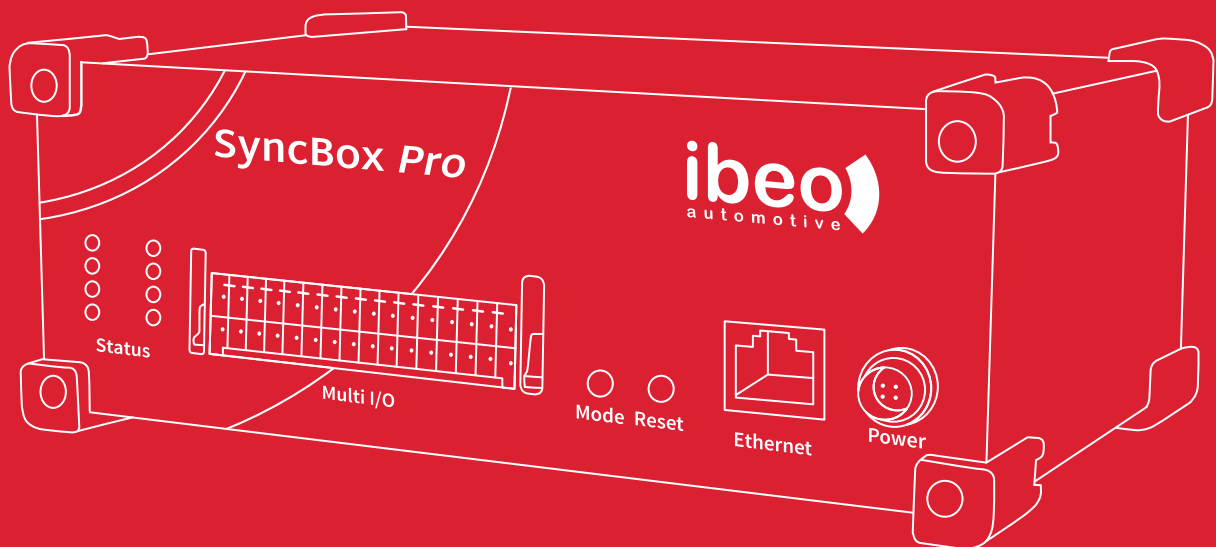


ibeo SyncBox Pro

All-in-one time synchronization solution



Key Features

- ▶ Independent clock aligning devices with different synchronization interfaces to the same time
- ▶ Acts as a hub between system time zones
- ▶ Capable to act as leader clock or follower clock depending on use case
- ▶ Supports all common time protocols and can be configured accordingly
- ▶ Monitors synchronization status for various interfaces

GENERAL INFORMATION	
Size	117 mm x 170 mm x 65 mm
Weight	650 g
Input Voltage	9-36 VDC (Nominal 12 VDC)
Power Consumption	Current draw @12 VDC < 1A Power consumption @12 VDC < 12W
Monitoring	Sync and device status visible by status LEDs and ibeo SyncBox Pro status messages over Ethernet
Supported Sensors	<p>Ibeo sensors / devices:</p> <ul style="list-style-type: none"> ▶ ibeoNEXT Generic 2020 Sample (PTP and gPTP) ▶ ibeo LUX (ibeo LUX Interface) ▶ ibeo ECU (PTP) ▶ Lane Tracker SICK LMS (NTP) <p>Third-party sensors / device support:</p> <ul style="list-style-type: none"> ▶ Sensors with GPS (PPS+NMEA) synchronization interface ▶ Sensors with NTP client synchronization interfaces ▶ Sensors with compatible PTP IEEE1588 / gPTP IEEE 802.1AS synchronization interfaces ▶ Devices with support for external trigger signals (e.g. cameras, IMUs, other sensors)

INTERFACE	QTY	IN	OUT	PROTOCOL	INFO
Ethernet Interface 100 Base-T	1	x	x	PTP IEEE1588	<ul style="list-style-type: none"> ▶ Time master / slave mode support ▶ L2 / Ipv4 layer support ▶ End to End / P2P mode support
			x	gPTP IEEE 802.1AS	▶ IEEE 802.1AS time master
			x	NTP	▶ Time server
ibeo LUX Interface	6		x	ibeo LUX time sync + mirror sync	▶ Synchronizes the ibeo LUX sensor time and scan start angle
GPS	1	x	x	<ul style="list-style-type: none"> ▶ PPS + NMEA ▶ PPS + NMEA 2.4 	<ul style="list-style-type: none"> ▶ GPS NMEA Server / Client mode support ▶ Configurable PPS signal characteristics, baudrate and NMEA message format
Isolated Trigger Output	5		x		<ul style="list-style-type: none"> ▶ User-supplied trigger output voltage 5-36 VDC ▶ Configurable trigger frequency and pulse width
Isolated Trigger Input	1	x			<ul style="list-style-type: none"> ▶ Trigger input voltage range 5-36 VDC ▶ Input signals are recorded
CAN	1	x	x		<ul style="list-style-type: none"> ▶ Possible support of other devices ▶ Implementation upon request
CAN FD	1	x	x		

This information has been put together with greatest care. However, any performance data given in this leaflet is subject to compliance with certain surrounding conditions and hence may vary from case to case. Further, we reserve the right to make changes at any time without notice. We strongly recommend (i) reconfirmation with Ibeo Automotive whether this information is still fully valid, before using it for final designs and (ii) to verify performance data taking into account the actual surrounding conditions. Ibeo Automotive takes no responsibility for any consequences due to non-compliance with these recommendations. (Subject to change without notice – 2021-03)