

## TMO3000-T/R

# Transmitter-receiver over Optical Fiber of 3 analog + 4 digital signals

## Long distance (up to 100 km) capability

All IRIG-B code, PPS transmission

TMO3000-T/R is a transmitter/receiver system made of 2 units allowing transmission of 3 analog and 4 digital signals over one optical fiber

Input signals are digitalized, transmitted and regenerated at the output allowing the system to be signal agnostic

Its optical fiber SFP connector makes it flexible to a large choice of optical fiber transceivers allowing transport over multi-mode or single mode fiber

**Receiver Optical fiber signal indicator** 

Choice of Rack 1U or Compact Box

### **Specification**

#### **Transmitter**

Three analog inputs (Vpp from 0.6 V to 6 V) 4 digital inputs, RS485 or TTL electrical levels One SFP Optical Fiber transceiver slot

#### Receiver

Three analog outputs (copy of transmitter input voltage) 4 digital outputs, RS485 or TTL electrical levels One SFP Optical Fiber transceiver slot

#### Signal Bandwidth

Analog: 200 Hz to 4 kHz Digital: up to 1 Mb/s

#### **Operating Wavelength**

Adjustable with SFP transceiver choice

#### System Delay/Jitter

10us/100ns

#### Connector

Analog Signal: BNC or BR2 (optional)

Digital Signal: Db9

Optical Fiber: SFP MSA transceiver, LC optical interface

#### **Temperature**

Operating Temperature: -20° to 60°C Storage Temperature: -20° to +70°C

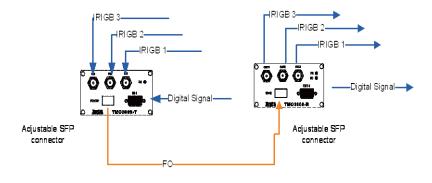
Operating relative humidity: 10% to 90% (non-condensing) Storage relative humidity: 5% to 95% (non-condensing)

#### **MTBF**

>100 000 hours

#### Typical Fiber Optic IRIG transmit/receive system







#### **Connector specification**

Db9 pin out

Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin9
RS485 E/S1+	RS485 E/S2+	RS485 E/S3+	RS485 E/S4+	GND	RS485 E/S1-	RS485 E/S2-	RS485 E/S3-	RS485 E/S4-
					TTL E/S1	TTL E/S2	TTL E/S3	TTL E/S4

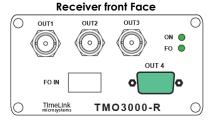
#### **Standard:** Compact Box (rackable with special front panel)

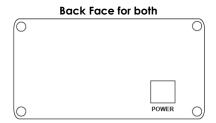
Size: L106 mm, H = 68mm, D=145 mm

Weight: 0,7kg

Power supply: external (power consumption <20W)

# Transmitter front Face IN1 IN2 IN3 ON IN 4 FO OUT IN 4 FO OUT IN 4 Microsystems TMO 3 0 0 0 - T





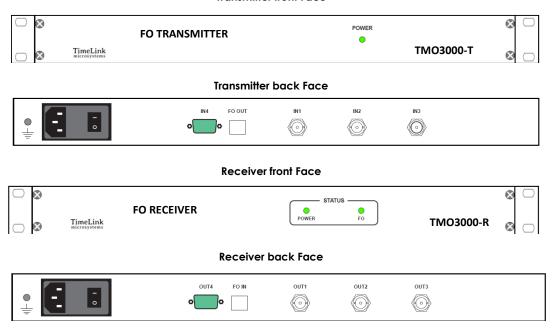
#### Option: Rack 1U

Size: 19" Depth: 350mm

Weight: 3kg

Power supply: 85 to 260V AC at 40-60Hz (power consumption <20W)

#### **Transmitter front Face**



#### Ordering code

TMO3000-T/R - CB- BNC -X = 20km Standard model

In Option we have: (\* is the default configuration)

1U = 1U rack or CB = compact box \*

BR2 = BR2 connectors or BNC = BNC connectors \*

X = Wavelength/Fiber/Distance for corresponding FO transceiver & SFP connector

X=1 means 1310nm single mode, LC,= 10 to 100 km standard = 20km \*

For other choices please contact us