

Infratek ITL-101 Universal Power Transmitters DC-50kHz

The Model **ITL101 Broad Band Power Transmitters** can be tailored to your needs and are suitable for DC, 50/60/400Hz power line, frequency inverter, and other electronic drives.

Features At A Glance

- Suitable for DC, power lines, inverters
- 1-, 2-, 3-, and multi-phase
- Isolated channels each phase (3000V)
- DC-50kHz, Option DC-100kHz
- Fast response output for process control
- Outputs: $\pm 20\text{mA}$ / $\pm 5\text{V}$ for power, 3600 Pulses / hour for energy
- 0.2 % accuracy
- Wide voltage range 10V-600V
- Wide current range 10mA-20A, extendable to 3000A
- Multi-phase: two outputs for power



Yields Correct Power For Any Wave Form

The ITL101 Broad Band DC-50kHz Power Transmitters are available as single-phase, 2-phase (ARON), 3-phase, and multi-phase versions (e.g. channel 1/2 in ARON, 0-20mA output; channel 3 for DC-power, 0-5V output). In addition to the standard current- and voltage ranges special ranges for current 10mA-20A, and voltage, 10V-600V, can be supplied. 3000Vac channel to channel – and channel to output isolation results in maximum freedom for input connections. The ITL101 withstands fast common mode transients and can be used in frequency inverters and other electronically switched loads.

Available options are: DC-100kHz, non-standard voltage range, non-standard current range, 40ms response output for process control, energy output (3600 pulses per hour for full scale), bipolar output to measure recuperated power, and single- and three phase 0-100A current sensors.

Specifications ITL101

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| Voltage ranges U_n | ITL101-1/3: 120V, 250V; ITL101-2/4: 200V, 400V; working range: 0-150 %; DC-50kHz |
| Current ranges I_n | ITL101-1/2/3/4: 1A, 2A, 5A, 10A, 20A; working range: 0-150 %; DC-50kHz |
| Power ranges | ITL101-1: voltage x current; ITL-101-2: 2 x voltage x current; ITL101-3: 3 x voltage x current; corresponds to 20mA or 5V. |
| Power Accuracy | 40-400Hz: 0.1 % reading +0.2 % range (0.2 % typical) $0 < \text{PF} < 1$; DC, 400-1000Hz: 0.3 % reading +0.2 % range, $0.7 < \text{PF} < 1$; 1kHz-10kHz: 1 % typical |
| Output | 0-20mA, 0-5V; Bipolar output optional |
| Overload continuous | Voltage: $1.5 \times U_n$; current: $I_n < 10\text{A}$, $3 \times I_n$; $I_n = 20\text{A}$, $1.5 \times I_n$. |
| Overload 1 second | Voltage: $3 \times U_n$; current: $I_n < 10\text{A}$, $5 \times I_n$; $I_n = 20\text{A}$, $2 \times I_n$. |
| Input-output isolation | 3kV / 50Hz / 1 minute |
| Temp. Range/- Coefficient | -10°C to + 50°C; 0.002 % / deg. C |
| Supply | 230V / 50Hz / 3VA; 115V/60Hz/3VA |
| Case | Light gray. Polycarbo / ABS case, wall mounting (M4 x15, 85 x 50mm) Support rail mounting (DIN EN 50022-35) |
| Size | H x W x D = 70 x 100 x 115mm; 400gr. |

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| Selection Guide | ITL101-1: Single phase transmitter, specify voltage and current ITL101-2: 2-phase transmitter (ARON), specify voltage and current ITL101-3: 3-phase transmitter, specify voltage and current ITL101-4: 2-phase transmitter (ARON), output 0-20mA; 1-phase transmitter output 1, 0-5V, specify voltages and currents. |
| Options | Option 01: Frequency range DC-100kHz Option 02: Non-standard voltage range, specify Option 03: Non-standard current range, specify Option 04: 40ms response time for process control Option 05: Energy output, 3600 TTL-pulses per hour at full scale Option 06: Bipolar output 0±20mA, 0±5V Option 07: Single- and three phase current sensor 0-100Arms / 150A dc. Wire size 7x12mm, case 70x100x142mm. |
| Ordering Information | Specify type, nominal voltage and current, supply 230V or 115V, and options. |

Connection Diagrams

