FIXTURE ACCESSORIES

- Mass Interconnect Products
- Opens Testing Products
- LEDCHECK Parts
- Board Marker Probes
- Personality Pins
- Indicator Probes
- Test Connectors
# Table of Contents

## Mass Interconnect Products / TTI-Testron VG Series

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>VGR4 / VGR12 / VGR12-RM1 / VGR24 / VGR24-RM1</td>
<td>VG Receiver</td>
<td>7</td>
</tr>
<tr>
<td>VGRCB-4C / VGFCB-4C</td>
<td>Coax VG Blocks</td>
<td>8</td>
</tr>
<tr>
<td>VGRCB-9C / VGFCB-9C</td>
<td>Coax VG Blocks</td>
<td>8</td>
</tr>
<tr>
<td>VGRCB-13C / VGFCB-13C</td>
<td>Coax VG Blocks</td>
<td>8</td>
</tr>
<tr>
<td>VGRCB-13CPF / VGFCB-13CPF</td>
<td>Combi Coax / Power Blocks</td>
<td>9</td>
</tr>
<tr>
<td>VGRCB-15CPF / VGFCB-15CPF</td>
<td>Combi Coax / Power Blocks</td>
<td>9</td>
</tr>
<tr>
<td>VGRCB-22CPF / VGFCB-22CPF</td>
<td>Combi Coax / Power Blocks</td>
<td>9</td>
</tr>
<tr>
<td>VGRCB-24CPF / VGFCB-24CPF</td>
<td>Combi Coax / Power Blocks</td>
<td>10</td>
</tr>
<tr>
<td>VGRCB-30CPF / VGFCB-30CPF</td>
<td>Combi Coax / Power Blocks</td>
<td>10</td>
</tr>
<tr>
<td>VGRCB-32CPF / VGFCB-32CPF</td>
<td>Combi Coax / Power Blocks</td>
<td>10</td>
</tr>
<tr>
<td>VGRCB-39CPS / VGFCB-39CPS</td>
<td>Coax / Power / Signal / Pneumatic Blocks</td>
<td>10</td>
</tr>
<tr>
<td>VGRCB-32P / VGFCB-32P</td>
<td>Power Blocks</td>
<td>11</td>
</tr>
<tr>
<td>VGRCB-13PNEU / VGFCB-13PNEU</td>
<td>Pneumatic Blocks</td>
<td>11</td>
</tr>
<tr>
<td>VGRCB-136 / VGFCB-136</td>
<td>Signal VG Blocks</td>
<td>12</td>
</tr>
<tr>
<td>VGRCB-170 / VGFCB-170</td>
<td>Signal VG Blocks</td>
<td>12</td>
</tr>
<tr>
<td>VGRCB-VM / VGFCB-VM / Tools</td>
<td>Vacuum Port Modules / Tools</td>
<td>13</td>
</tr>
</tbody>
</table>

## Opens Testing Products

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agilent TestJet Parts</td>
<td>TestJet &amp; VTEP Parts for Agilent 3070 fixtures</td>
</tr>
<tr>
<td>GenRad OpensXpress Parts</td>
<td>OpensXpress Parts for GenRad fixtures</td>
</tr>
<tr>
<td>Teradyne: FrameScan Plus &amp; FrameScan FX 2.0 Parts</td>
<td></td>
</tr>
</tbody>
</table>

## Special Products

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Analog Color Analyser</td>
<td>Analog LEDCHECK VIII</td>
</tr>
<tr>
<td>Analog Color Analyser</td>
<td>Analog LEDCHECK VIII Accessories</td>
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<tr>
<td>Digital Color Analyser</td>
<td>Digital LEDCHECK III &amp; V</td>
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<td>Digital Color Analyser</td>
<td>Digital LEDCHECK Accessories</td>
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<tr>
<td>Board Marker Probe</td>
<td>Board Marker Probe</td>
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<tr>
<td>Personality Pins for Agilent Fixtures / Indicator Probe</td>
<td>Personality Pins for Agilent Fixtures / Indicator Probe</td>
</tr>
<tr>
<td>HDMI Connector</td>
<td>Floating Test Connectors</td>
</tr>
<tr>
<td>Mini Western Connectors</td>
<td>Floating Test Connectors</td>
</tr>
<tr>
<td>USB Connectors</td>
<td>Floating Test Connectors</td>
</tr>
</tbody>
</table>
Mass Interconnect Products

The VG Series products are designed for Mass Interconnect terminations of Rack & Stack test systems.

There are several VG receiver available which will accept any fixtures with a Pylon Interface. Such fixtures are also available from ECT in different sizes.

Although someone might say with a smile that “VG” stands for “Very Good”, whereas the right abbreviation VG is:

- “V”: VXI (Vme Xtensions for Instrumentation) and
- “G”: GPIB (General Purpose Instrument Bus/ HPIB / IEEE-488).

There are a number of different block types:
- “Coax: up to 18 GHz
- “Power: up to 50 Amps per pin
- “Coax & Power combined
- “Signal: up to 170 pins, @250VAC/5 Amps
- “Pneumatic: up to 13 fittings
- “Vacuum: port modules

Other blocks or cable assemblies are available upon request; please contact your closest ECT location.

These products were developed and produced by TTI-Testron, which was acquired by ECT in 1999. Since then ECT continued to provide the VG Series Mass Interconnect product through their worldwide distribution channels.

Typical industry applications are for example Aircraft, Military, Medical, Consumer Electronics, Networking, Telecommunications and Test Systems…
**Mini 4 Block Desktop Receiver**
Model Number: VGR4
P/No: 122
To be used for small benchtop test requirements with max. 4 receiver blocks.
No vacuum port module to be used.
For the fixture side a metal Adapter Box VGF4-0808-AB (P/No 123), size 8x8” (203 x 203mm) is available.

**12 Block Desktop Receiver**
Model Number: VGR12
P/No: 21
To be used for all fixtures with a Pylon interface (GenRad, ITA, R&S).
Up to 10 VG receiver blocks and max. 2 vacuum port modules can be installed.
Vacuum port module to be ordered separately VGRCB-VPM (P/No 576).

**12 Block Rack Mount Receiver**
Model Number: VGR12-RM1
P/No: 140
Same as above VGR12 but for mounting in a 19” Rack.

**24 Block Double-Row Desktop Receiver**
Model Number: VGR24
P/No: 207
The VGR24 will accommodate up to 22 receiver blocks and a max. of 2 vacuum port modules in the bottom or top row.

**24 Block Double-Row Rack Mount Receiver**
Model Number: VGR24-RM1
P/No: 206
Same as above VGR24 but for mounting in a 19” Rack.

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Dimensions of the Rack Mount Receivers VGR12-RM1 and VGR24-RM1

* VGR24-RM1 adds an additional 2U to the height
1U = 1.75” (44.5 mm)
### Coax VG Blocks

#### Mass Interconnect Products

<table>
<thead>
<tr>
<th><strong>Receiver Side</strong></th>
<th><strong>Fixture Side</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4-Position up to 18 GHz Block</strong></td>
<td><strong>4-Position up to 18 GHz Block</strong></td>
</tr>
<tr>
<td>Model Number</td>
<td>Model Number</td>
</tr>
<tr>
<td>VGRCB-4C</td>
<td>VGFCB-4C</td>
</tr>
<tr>
<td>P/No</td>
<td>P/No</td>
</tr>
<tr>
<td>611</td>
<td>610</td>
</tr>
<tr>
<td>Impedance</td>
<td>Impedance</td>
</tr>
<tr>
<td>50 Ω</td>
<td>50 Ω</td>
</tr>
</tbody>
</table>

**It includes**
- 2 installed alignment pins
- 2 installed floating mounting screws
- 4 holes (without contacts)

**The coax contacts must be ordered separately under** P/No A32433
- (50 Ω blind mate plug contact for a SMA connector)

<table>
<thead>
<tr>
<th><strong>9-Position up to 18 GHz Block</strong></th>
<th><strong>9-Position up to 18 GHz Block</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Number</td>
<td>Model Number</td>
</tr>
<tr>
<td>VGRCB-9C</td>
<td>VGFCB-9C</td>
</tr>
<tr>
<td>P/No</td>
<td>P/No</td>
</tr>
<tr>
<td>1121</td>
<td>1122</td>
</tr>
<tr>
<td>Impedance</td>
<td>Impedance</td>
</tr>
<tr>
<td>50 Ω</td>
<td>50 Ω</td>
</tr>
</tbody>
</table>

**It includes**
- 2 installed alignment pins
- 2 installed floating mounting screws
- 9 holes (without contacts)

**The coax 50 Ω blind mate plug contacts must be ordered separately**
- for crimp connection: A31897
- for SMA connection: A35764

<table>
<thead>
<tr>
<th><strong>13-Position up to 3.7 GHz Block</strong></th>
<th><strong>13-Position up to 3.7 GHz Block</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Number</td>
<td>Model Number</td>
</tr>
<tr>
<td>VGRCB-13C</td>
<td>VGFCB-13C</td>
</tr>
<tr>
<td>P/No</td>
<td>P/No</td>
</tr>
<tr>
<td>482</td>
<td>483</td>
</tr>
<tr>
<td>Impedance</td>
<td>Impedance</td>
</tr>
<tr>
<td>50 Ω</td>
<td>50 Ω</td>
</tr>
</tbody>
</table>

**It includes**
- 2 installed alignment pins
- 2 installed floating mounting screws
- 13 installed coax contacts

(The center conductor and the outer shell are spring loaded)
- Replacement Coax Receiver probe: P/No 480
- Replacement center probe: A35860
**Combi Coax / Power Blocks**

**Receiver Side**

**13-Position 50 Ω Coax/Power Block**

Model Number: VGRCB-13CPF
P/No: 580
Coax contact up to 500 MHz
Power contact up to 30 Amps

**It includes**
- 2 installed alignment pins
- 2 installed floating mounting screws
- 13 holes (without contacts)

**Contacts must be ordered separately**
- Coax contact with 36” coax cable
  CR-CA50RG174-36 P/No 637
- Power contact
  - CR-610116102

**15-Position 50 Ω Coax/Power Block**

Model Number: VGRCB-15CPF
P/No: 910
Coax contact up to 500 MHz
Power contact up to 30 Amps

**It includes**
- 2 installed alignment pins
- 2 installed floating mounting screws
- 15 holes (without contacts)

**Contacts must be ordered separately**
- Coax contact with 36” coax cable
  CR-CA50RG174-36 P/No 637
- Power contact
  - CR-610116102

**22-Position 50 Ω Coax/Power Block**

Model Number: VGRCB-22CPF
P/No: 527
Coax contact up to 1 GHz
Power contact up to 50 Amps/250 VAC

**It includes**
- 2 installed alignment pins
- 2 installed floating mounting screws
- 22 holes (without contacts)

**Contacts must be ordered separately**
- Mini coax contact 610104114 or
- Coax contact with 36” coax cable
  CR-CA50RG174-36 P/No 643
- Mini power contact CR-610116112

**Fixture Side**

**13-Position 50 Ω Coax/Power Block**

Model Number: VGFCB-13CPF
P/No: 579
Coax contact up to 500 MHz
Power contact up to 30 Amps

**It includes**
- 2 installed bushings
- 2 screws 4-40
- 13 holes (without contacts)

**Contacts must be ordered separately**
- Coax contact with 36” coax cable
  CF-CA50RG174-36 P/No 623
- Power contact
  - CF-610115102 for 10 AWG
  - CF-610115103 for 12 AWG

**15-Position 50 Ω Coax/Power Block**

Model Number: VGFCB-15CPF
P/No: 911
Coax contact up to 500 MHz
Power contact up to 30 Amps

**It includes**
- 2 tooling holes
- 2 screws 4-40
- 15 holes (without contacts)

**Contacts must be ordered separately**
- Coax contact with 36” coax cable
  CF-CA50RG174-36 P/No 623
- Power contact
  - CF-610115102 for 10 AWG
  - CF-610115103 for 12 AWG

**22-Position 50 Ω Coax/Power Block**

Model Number: VGFCB-22CPF
P/No: 528
Coax contact up to 1 GHz
Power contact up to 50 Amps/250 VAC

**It includes**
- 2 installed bushings
- 2 screws 4-40
- 22 holes (without contacts)

**Contacts must be ordered separately**
- Mini coax contact 610103115 or
- Coax contact with 36” coax cable
  CF-CA50RG174-36 P/No 632
- Mini power contact CF-0883011-02

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Pictures show assembled VG-Blocks
Specifications subject to change without notice
VGRCB-24CPF / VGFGB-24CPF
VGRCB-30CPF / VGFGB-30CPF
VGRCB-32CPF / VGFGB-32CPF

**Combi Coax / Power Blocks**

**Receiver Side**

### 24-Position 50Ω Coax/Power Block
- **Model Number**: VGRCB-24CPF
- **P/No**: 908
- **Coax contact** up to 1 GHz
- **Power contact** up to 50 Amps/250 VAC

**It includes**
- 2 installed alignment pins
- 2 installed floating mounting screws

**Contacts must be ordered separately**
- Mini coax contact 610104114 or
- Coax contact with 36” coax cable CR-CA50RG174-36: P/No 643
- Mini power contact CR-610116112

### 30-Position 50Ω Coax/Power Block
- **Model Number**: VGRCB-30CPF
- **P/No**: 525
- **Coax contact** up to 1 GHz
- **Power contact** up to 50 Amps/250 VAC

**It includes**
- 2 installed alignment pins
- 2 installed floating mounting screws

**Contacts must be ordered separately**
- Mini coax contact 610104114 or
- Coax contact with 36” coax cable CR-CA50RG174-36: P/No 643
- Mini power contact CR-610116112

### 32-Position 50Ω Coax/Power Block
- **Model Number**: VGRCB-32CPF
- **P/No**: 906
- **Coax contact** up to 1 GHz
- **Power contact** up to 50 Amps/250 VAC

**It includes**
- 2 installed alignment pins
- 2 installed floating mounting screws

**Contacts must be ordered separately**
- Mini coax contact 610104114 or
- Coax contact with 36” coax cable CR-CA50RG174-36: P/No 643
- Mini power contact CR-610116112

**Fixture Side**

### 24-Position 50Ω Coax/Power Block
- **Model Number**: VGFGB-24CPF
- **P/No**: 909
- **Coax contact** up to 1 GHz
- **Power contact** up to 50 Amps/250 VAC

**It includes**
- 2 installed bushings
- 2 screws 4-40
- 24 holes (without contacts)

**Contacts must be ordered separately**
- Mini coax contact 610103115 or
- Coax contact with 36” coax cable CF-CA50RG174-36: P/No 632
- Mini power contact CF-0883011-02

### 30-Position 50Ω Coax/Power Block
- **Model Number**: VGFGB-30CPF
- **P/No**: 526
- **Coax contact** up to 1 GHz
- **Power contact** up to 50 Amps/250 VAC

**It includes**
- 2 installed bushings
- 2 screws 4-40
- 30 holes (without contacts)

**Contacts must be ordered separately**
- Mini coax contact 610103115 or
- Coax contact with 36” coax cable CF-CA50RG174-36: P/No 632
- Mini power contact CF-0883011-02

### 32-Position 50Ω Coax/Power Block
- **Model Number**: VGFGB-32CPF
- **P/No**: 907
- **Coax contact** up to 1 GHz
- **Power contact** up to 50 Amps/250 VAC

**It includes**
- 2 installed bushings
- 2 screws 4-40
- 32 holes (without contacts)

**Contacts must be ordered separately**
- Mini coax contact 610103115 or
- Coax contact with 36” coax cable CF-CA50RG174-36: P/No 632
- Mini power contact CF-0883011-02

Pictures show assembled VG-Blocks
Specifications subject to change without notice
### Receiver Side

**39-Position 50Ω Coax/Power/Signal Block**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>VGRCB-39CPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>P/No</td>
<td>904</td>
</tr>
<tr>
<td>Coax contact</td>
<td>up to 1 GHz</td>
</tr>
<tr>
<td>Power contact</td>
<td>up to 50Amps/250VAC</td>
</tr>
<tr>
<td>Signal contact</td>
<td>up to 10 Amps</td>
</tr>
</tbody>
</table>

**It includes:**
- 2 installed alignment pins
- 2 installed floating mounting screws
- 39 holes (without contacts): of which 19 are for coax/power contact and 20 for signal contact

**Contacts must be ordered separately**
- Mini coax contact 610104115 or Coax contact with 36” coax cable CR-CA50RG174-36: P/No 643
- Mini power contact CR-610116112
- Signal contact 610110101

**32-Position Power Block**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>VGRCB-32P</th>
</tr>
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<tbody>
<tr>
<td>P/No</td>
<td>687</td>
</tr>
<tr>
<td>Current rating</td>
<td>25 Amps</td>
</tr>
</tbody>
</table>

**It includes:**
- 32 installed gold-plated receptacles with aligned solder cups, flush mounted
- 2 screws 4-40

**The high current probes with a spear tip must be ordered separately**
- P/No VGR32P-HCP or HCP-14B

**13-Position Pneumatic Lines Block**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>VGRCB-13PNEU</th>
</tr>
</thead>
<tbody>
<tr>
<td>P/No</td>
<td>902</td>
</tr>
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</table>

**It includes:**
- 13 installed pneumatic fittings with a through-hole of .125” (3,2mm) Ø and at the far-side a .157” (4,0mm) Ø barbe for 4 mm hose connections
- 2 installed guide pins
- 2 installed floating mounting screws

**Replacement parts are**
- receiver air fitting contact A32431
- O-Ring A34432

### Fixture Side

**39-Position 50Ω Coax/Power/Signal Block**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>VGFCB-39CPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>P/No</td>
<td>905</td>
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<tr>
<td>Coax contact</td>
<td>up to 1 GHz</td>
</tr>
<tr>
<td>Power contact</td>
<td>up to 50Amps/250VAC</td>
</tr>
<tr>
<td>Signal contact</td>
<td>up to 10 Amps</td>
</tr>
</tbody>
</table>

**It includes:**
- 2 installed bushings
- 2 screws 4-40
- 39 holes (without contacts): of which 19 are for coax/power contact and 20 for signal contact

**Contacts must be ordered separately**
- Mini coax contact 610103115 or Coax contact with 36” coax cable CF-CA50RG174-36: P/No 632
- Mini power contact CF-610116112
- Signal contact 610110101

**32-Position Power Block**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>VGFCB-32P</th>
</tr>
</thead>
<tbody>
<tr>
<td>P/No</td>
<td>686</td>
</tr>
<tr>
<td>Current rating</td>
<td>25 Amps</td>
</tr>
</tbody>
</table>

**It includes:**
- 32 installed gold plated solder pot contacts with flat heads .177” (4,5mm) Ø
- 2 screws 4-40

**Replacement contact:** A10206

**13-Position Pneumatic Lines Block**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>VGFCB-13PNEU</th>
</tr>
</thead>
<tbody>
<tr>
<td>P/No</td>
<td>903</td>
</tr>
</tbody>
</table>

**It includes:**
- 13 installed pneumatic fittings with a through-hole of .125” (3,2mm) Ø and at the far-side a .157” (4,0mm) Ø barbe for 4 mm hose connections
- 2 installed bushings
- 2 installed mounting screws 4-40

**Replacement parts are**
- fixture air fitting contact A32432
**Signal VG Blocks**

**Receiver Side**

### 136-Position Signal Block

For use with ribbon cables plugging directly onto the back of the blocks.

**Model Numbers**

- VGRCB-136 P/No 820479 with square 25mil wire wrap receptacles
- VGRCB-136F P/No 820415 same as above but floating block
- VGRCB-136R P/No 912 with 25mil Ø round pin receptacles
- VGRCB-136F-R P/No 820424 Floating block with round pin receptacles

**It includes**

- 136 installed receptacles (the square pins are not aligned)
- 136 installed spring loaded probes with .160” (4.1mm) full travel
- 2 alignment pins in the floating blocks
- 2 screws 4-40 or 2 floating mounting screws

**Replacement parts are**

- Probes: EPA-2B40
- Receptacles: SPR-2W-2 with square WW-pin SDN160R with round pin or SPR-2W-3 gold plated with round pins

### 170-Position Signal Block

**Model Numbers**

- VGRCB-170 P/No B10783-1L with square 25mil wire wrap receptacles
- VGRCB-170F P/No 820411 same as above but floating block
- VGRCB-170R P/No B10783-R with 25mil Ø round pin receptacles
- VGRCB-170F-R P/No 820423 Floating block with round pin receptacles

**It includes**

- 170 installed receptacles (the square pins are aligned)
- 170 installed spring loaded probes with .160” (4.1mm) full travel
- 2 alignment pins in the floating blocks
- 2 screws 4-40 or 2 floating mounting screws

**Replacement parts are**

- Probes: EPA-2B40, Receptacles: SPR-2W-2 with square WW-pin SDN160R with round pin or SPR-2W-3 gold plated with round pins

**Fixture Side**

### 136-Position Signal Block

For use with ribbon cables plugging directly onto the back of the blocks.

**Model Numbers**

- VGFCB-136 P/No 900 with square 25mil wire wrap pins
- VGFCB-136F P/No 820417 same as above but for floating block
- VGFCB-136R P/No 820494 with 25mil Ø round pins

**It includes**

- 136 gold plated contacts with flat heads (the square pins are aligned)
- 2 installed bushings in the floating block
- 2 screws 4-40

**Replacement parts are**

- Contacts with square pin SIP-90-2
- Contacts with round pin A12962

### 170-Position Signal Block

**Model Numbers**

- VGFCB-170 P/No B10031-VLD with square 25mil wire wrap pins
- VGFCB-170F P/No 820413 same as above but for floating block
- VGFCB-170R P/No 660 with 25mil Ø round pins
- VGFCB-170F-R P/No 820422 Floating block with round pin receptacles

**It includes**

- 170 gold plated contacts with flat heads (the square pins are aligned)
- 2 installed bushings in the floating blocks
- 2 screws 4-40

**Replacement parts are**

- Contacts with square pin SIP-90-2
- Contacts with round pin A12962

*Pictures show assembled VG-Blocks
Specifications subject to change without notice*
## Vacuum Port Modules / Tools

### Receiver Side

<table>
<thead>
<tr>
<th>Receiver Vacuum Port Module</th>
<th>Model Number</th>
<th>VGRCB-VPM</th>
<th>P/No</th>
<th>576</th>
</tr>
</thead>
<tbody>
<tr>
<td>It includes</td>
<td>Vacuum port</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 screws 6-32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 brass pipe plug with tapered thread for ½&quot; threaded hole</td>
<td></td>
<td></td>
<td></td>
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### Fixture Side

<table>
<thead>
<tr>
<th>Fixture Vacuum Port Module</th>
<th>Model Number</th>
<th>VGFCB-VPM</th>
<th>P/No</th>
<th>B10056-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>It includes</td>
<td>Vacuum port</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Insertion tools

- Installation tool for fixture contacts in VGFCB-9C: P/No A32492
- Combo insertion tool for floating blocks: P/No B32503

### Extraction tools

- Receiver Coax/Power extraction tool VGRXT: P/No 412601
- Fixture Coax/Power extraction tool VGFXT: P/No 412602
- Receiver/Fixture Mini Coax/Power extraction tool VGMXT: P/No 412615

### Torque Wrench

- SMA connector torque wrench for VGR/FCB-9C: P/N A31887
OPENS TESTING PRODUCTS
**Opens Testing Products**

Since some time already, US companies originally had developed vectorless test techniques for detecting open pins on component packages and connectors:

- HP/Agilent with TestJet and VTEP parts
- GenRad with OpensXpress parts (now part of Teradyne Inc.)
- Teradyne with FrameScan Plus and FrameScan FX2.0 parts.

**ECT itself developed the Hanger probes:**

**Hanger Probe**

Hanger Probes – The compliant motion of the ECT hanger style probes is perfect for use with non level or non parallel applications. By lessening the side forces, there is less opportunity for damage to the sensors under test.

Old style during gate closure. Note stress interference due to non-compliance in the sensor probe combination.

ECT spring loaded hanger style offers compliance during gate closure and operation.
<table>
<thead>
<tr>
<th><strong>TestJet MUX Card pkg</strong></th>
<th><strong>Sensor Plate .475” x .375” x .050” thick</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>for up to 64 sensors</td>
<td>12.0 x 9.5 x 1.3 mm thick</td>
</tr>
<tr>
<td>P/No: 804352</td>
<td>Size SO14, SO16</td>
</tr>
<tr>
<td>Agilent P/No E3849A</td>
<td>P/No: 806437</td>
</tr>
<tr>
<td>It includes</td>
<td>Agilent P/No E3851A</td>
</tr>
<tr>
<td></td>
<td>packing unit: 10 pieces</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>TESTJET MUX + Ref Card pkg</strong></th>
<th><strong>Sensor Plate .575” x .425” x .050” thick</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>for up to 64 sensors &amp; ConnectCheck</td>
<td>14.6 x 10.8 x 1.3 mm thick</td>
</tr>
<tr>
<td>P/NO: 806924</td>
<td>Size SO20</td>
</tr>
<tr>
<td>Agilent P/No E3969A</td>
<td>P/No: 806438</td>
</tr>
<tr>
<td>Signal Conditioner + Reference Board</td>
<td>Agilent P/No E3852A</td>
</tr>
<tr>
<td>It includes</td>
<td>packing unit: 10 pieces</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>TestJet Probe pkg</strong></th>
<th><strong>Sensor Plate 1.25” x 1.25” x .050” thick</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>for mounting in bottom side probe field</td>
<td>31.8 x 31.8 x 1.3 mm thick</td>
</tr>
<tr>
<td>P/No: 804353</td>
<td>Size SO14 / SO16</td>
</tr>
<tr>
<td>Agilent P/Nos: E3850A / E3960A</td>
<td>P/No: 806435</td>
</tr>
<tr>
<td>It includes</td>
<td>Agilent P/No E3853A</td>
</tr>
<tr>
<td></td>
<td>packing unit: 10 pieces</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>ECT Hanger TestJet pkg</strong></th>
<th><strong>Sensor Plate 2.56” x 2.56” x .050” thick</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>for mounting in bottom and top side probe field</td>
<td>65 x 65 x 1.3 mm thick</td>
</tr>
<tr>
<td>P/No: 804855 alternative for Agilent P/No E3850A/E3960A</td>
<td>P/No: 806436</td>
</tr>
<tr>
<td>It includes</td>
<td>Agilent P/No E3854A</td>
</tr>
<tr>
<td></td>
<td>packing unit: 1 piece</td>
</tr>
</tbody>
</table>

Dimensions in inches (millimeters)

Specifications subject to change without notice
**Agilent TestJet Parts**

**Sensor Plate .500” x 6.25” x .050” thick**
- 12.7 x 159 x 1,3 mm thick
- P/No: 806439
- Agilent P/No: E3964A
- Packing unit: 1 piece

**Polarity Check vertical Amplifier pkg**
- P/No: 805283
- Agilent P/Nos: E3845A / E3847A
- **It includes**
  - 1 amplifier board
  - 2 probes 805284
  - 2 receptacles 805287
  - Packing unit: 1 package

**Sensor Plate for Polarity Check**
- for SMT capacitors size B-C
- Size: .248” x .147” (6,3 x 3,7 mm)
- P/No: 805285
- Agilent P/No: E3891A
- Packing unit: 10 pieces

**Sensor Plate for Polarity Check**
- for SMT capacitors Size D
- Size: .298” x 191” (7,6 x 4,9 mm)
- P/No: 805286
- Agilent P/No: E3892A
- Packing unit: 10 pieces

**Assembled Vertical Polarity Check part**
- P/No of ECT Munich: SP-0074
- P/No of Dover/Hungary: 805283A-BC
- **It includes**
  - 2 spring probes 805284
  - 1 sensor plate B-C 805285
  - soldered to amplifier board 805283
  - Packing unit: 1 piece

**Assembled Vertical Polarity Check part**
- P/No of ECT Munich: SP-0075
- P/No of Dover/Hungary: 805283A-D
- **It includes**
  - 2 spring probes 805284
  - 1 sensor plate D 805286
  - soldered to amplifier board 805283
  - Packing unit: 1 piece

**Replacement spring probe**
- for amplifier board 804353
- P/No: LTP-25TJ-4
- Agilent P/No: E3963A
- Spring force 4 oz (110 cN)
- at working travel .315” (8,00 mm)

**Short Hanger Probe**
- P/No: HTJ-25A
- OAL: 1.25” (31,8 mm)
- Plunger length: .279” (7,1 mm)
- Full Travel: .220” (5,6 mm)
- Working travel: .167” (4,2 mm)
- Spring force: 3.5 oz (100cN)
- at working travel
**Long Hanger Probe**

P/No: SPL-25A-331  
OAL: 1.625” (41.3 mm)  
Plunger length: .654” (26.1 mm)  
Full travel: .220” (5.6 mm)  
Working travel: .167” (4.2 mm)  
Spring force: 3.5 oz (100 cN) at working travel

**Extra Long Hanger Probe**

P/No: SPL-25A-332  
OAL: 2” (50.8 mm)  
Plunger length: 1.029” (26.1 mm)  
Full travel: .220” (5.6 mm)  
Working travel: .167” (4.2 mm)  
Spring force: 3.5 oz (100 cN) at working travel
Agilent TestJet Parts

TestJet & VTEP Parts for Agilent 3070 fixtures

VTEP MUX Card pkg

P/No: 816634
Agilent P/No: N4300A
Signal Conditioning MUX Card

It includes
- 1 MUX Card
- connectors
- ribbon cable

VTEP MUX + Ref Card pkg

P/No: 816635
Agilent P/No: N4307A
Connect Check MUX card

It includes
- 1 MUX + Ref Card
- connectors
- ribbon cable

VTEP Horizontal Amplifier pkg

P/No: 816636
Agilent P/No: N4301A / N4313A

It includes
- 1 Amplifier board
- 2 probes LTP-25TJ-4 (Agilent P/No E3963A)

VTEP Sensor Plate 2.5” x 2.5”

63,5 x 63,5 mm
P/No: 816773
Agilent P/No: N4303A
packing unit: 1 piece

VTEP Polarity Check Vertical Amplifier pkg

P/No: 816660
Agilent P/No: N4311A / N4312A

It includes
- 1 amplifier board
- 2 probes 805284
- 2 receptacles 805287

Sensor Plate for VTEP Polarity Check

for SMT capacitors size B-C
size .248” x .147” (6,3 mm x 3,7 mm)
P/No: 805285
Agilent P/No: E3891A
packing unit: 10 pieces

VTEP MUX Card pkg

P/No: 816634
Agilent P/No: N4300A
Signal Conditioning MUX Card

It includes
- 1 MUX Card
- connectors
- ribbon cable

VTEP MUX + Ref Card pkg

P/No: 816635
Agilent P/No: N4307A
Connect Check MUX card

It includes
- 1 MUX + Ref Card
- connectors
- ribbon cable

VTEP Horizontal Amplifier pkg

P/No: 816636
Agilent P/No: N4301A / N4313A

It includes
- 1 Amplifier board
- 2 probes LTP-25TJ-4 (Agilent P/No E3963A)

VTEP Sensor Plate 2.5” x 2.5”

63,5 x 63,5 mm
P/No: 816773
Agilent P/No: N4303A
packing unit: 1 piece

VTEP Polarity Check Vertical Amplifier pkg

P/No: 816660
Agilent P/No: N4311A / N4312A

It includes
- 1 amplifier board
- 2 probes 805284
- 2 receptacles 805287

Sensor Plate for VTEP Polarity Check

for SMT capacitors size B-C
size .248” x .147” (6,3 mm x 3,7 mm)
P/No: 805285
Agilent P/No: E3891A
packing unit: 10 pieces

VTEP MUX Card pkg

P/No: 816634
Agilent P/No: N4300A
Signal Conditioning MUX Card

It includes
- 1 MUX Card
- connectors
- ribbon cable

VTEP MUX + Ref Card pkg

P/No: 816635
Agilent P/No: N4307A
Connect Check MUX card

It includes
- 1 MUX + Ref Card
- connectors
- ribbon cable

VTEP Horizontal Amplifier pkg

P/No: 816636
Agilent P/No: N4301A / N4313A

It includes
- 1 Amplifier board
- 2 probes LTP-25TJ-4 (Agilent P/No E3963A)

VTEP Sensor Plate 2.5” x 2.5”

63,5 x 63,5 mm
P/No: 816773
Agilent P/No: N4303A
packing unit: 1 piece

VTEP Polarity Check Vertical Amplifier pkg

P/No: 816660
Agilent P/No: N4311A / N4312A

It includes
- 1 amplifier board
- 2 probes 805284
- 2 receptacles 805287

Sensor Plate for VTEP Polarity Check

for SMT capacitors size B-C
size .248” x .147” (6,3 mm x 3,7 mm)
P/No: 805285
Agilent P/No: E3891A
packing unit: 10 pieces

VTEP MUX Card pkg

P/No: 816634
Agilent P/No: N4300A
Signal Conditioning MUX Card

It includes
- 1 MUX Card
- connectors
- ribbon cable

VTEP MUX + Ref Card pkg

P/No: 816635
Agilent P/No: N4307A
Connect Check MUX card

It includes
- 1 MUX + Ref Card
- connectors
- ribbon cable

VTEP Horizontal Amplifier pkg

P/No: 816636
Agilent P/No: N4301A / N4313A

It includes
- 1 Amplifier board
- 2 probes LTP-25TJ-4 (Agilent P/No E3963A)

VTEP Sensor Plate 2.5” x 2.5”

63,5 x 63,5 mm
P/No: 816773
Agilent P/No: N4303A
packing unit: 1 piece

VTEP Polarity Check Vertical Amplifier pkg

P/No: 816660
Agilent P/No: N4311A / N4312A

It includes
- 1 amplifier board
- 2 probes 805284
- 2 receptacles 805287

Sensor Plate for VTEP Polarity Check

for SMT capacitors size B-C
size .248” x .147” (6,3 mm x 3,7 mm)
P/No: 805285
Agilent P/No: E3891A
packing unit: 10 pieces

VTEP MUX Card pkg

P/No: 816634
Agilent P/No: N4300A
Signal Conditioning MUX Card

It includes
- 1 MUX Card
- connectors
- ribbon cable

VTEP MUX + Ref Card pkg

P/No: 816635
Agilent P/No: N4307A
Connect Check MUX card

It includes
- 1 MUX + Ref Card
- connectors
- ribbon cable

VTEP Horizontal Amplifier pkg

P/No: 816636
Agilent P/No: N4301A / N4313A

It includes
- 1 Amplifier board
- 2 probes LTP-25TJ-4 (Agilent P/No E3963A)
<table>
<thead>
<tr>
<th>Product Description</th>
<th>Dimensions (mm)</th>
<th>P/No.</th>
<th>Packing Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensor Plate 1.25” x 1.25” x .050” thick</td>
<td>31.8 x 31.8 x 1.3</td>
<td>806435</td>
<td>10 pieces</td>
</tr>
<tr>
<td>Sensor Plate 2.56” x 2.56” x .050” thick</td>
<td>65 x 65 x 1.3</td>
<td>806436</td>
<td>1 piece</td>
</tr>
<tr>
<td>Sensor Plate .475” x .375” x .050” thick</td>
<td>12.0 x 9.5 x 1.3</td>
<td>806437</td>
<td>10 pieces</td>
</tr>
<tr>
<td>Sensor Plate .575” x .425” x .050” thick</td>
<td>14.6 x 10.8 x 1.3</td>
<td>806438</td>
<td>10 pieces</td>
</tr>
<tr>
<td>Sensor Plate .475” x .375” x .050” thick</td>
<td>159 x 12.7 x 1.3</td>
<td>806439</td>
<td>1 piece</td>
</tr>
</tbody>
</table>

Notes:
- Dimensions in inches (millimeters)
- Specifications subject to change without notice
- OpenXpress Parts
- GenRad opensXpress Parts
Teradyne: FrameScan Plus & FrameScan FX 2.0 Parts

FrameScan FX 2.0 Fixture Kit pkg
for up to 64 sensors
P/No: 825604
Teradyne P/No: 603-946-00
It includes
1 FrameScan FX 2.0 Selector Board (MUX Card)
connectors
ribbon cable

FrameScan Plus MUX Card pkg
for up to 64 sensors
P/No: 805960
It includes
1 FrameScan Plus MUX Card
connectors
ribbon cable
Will not work with Teradyne Test Station Ultra Pin

ECT Hanger FrameScanPlus Amplifier pkg
P/No: 804855
Teradyne P/No: 047-531-00
Signal Conditioner + Reference Board
It includes
• 1 amplifier board with 2 tapped pins SAP-25W-3
• 2 hanger probes with spiral spring head HTJ-25A
(Teradyne P/No 047-534-00)

FrameScan FX 2.0 Horizontal Amp pkg
P/No: 825510
Teradyne P/No: 093-284-00
It includes
1 amplifier board
2 probes like LTP-25TJ-4

Sensor Plate .475” x .375” x .050” thick
12,0 x 9,5 x 1,3 mm thick
Size SO14, SO16
P/No: 806438
Teradyne P/No: 090-360-00
packing unit: 10 pieces

Sensor plate .575” x .425” x .050” thick
14,6 x 10,8 x 1,3 mm thick
Size SO20
P/No: 806433
Teradyne P/No: 090-361-00
packing unit: 10 pieces

Sensor Plate .750” x .500” x .050” thick
31,8 x 10,8 x 1,3 mm thick
Size SO14, SO16
P/No: 806437
Teradyne P/No: 090-360-00
packing unit: 10 pieces

FrameScan Plus MUX Card pkg
for up to 64 sensors
P/No: 806435
Teradyne P/No: 047-531-00
It includes
1 FrameScan Plus MUX Card
connectors
ribbon cable

FrameScan FX 2.0 Horizontal Amp pkg
P/No: 825510
Teradyne P/No: 093-284-00
It includes
1 amplifier board
2 probes like LTP-25TJ-4

Sensor Plate .250” x .250” x .050” thick
65 x 65 x 1,3 mm thick
P/No: 806436
Teradyne P/No: 090-364-00
packing unit: 1 piece

Dimensions in inches (millimeters)
Specifications subject to change without notice
**Sensor Plate 6.25” x .500” x .050” thick**

- 159 x 12,7 x 1,3 mm thick
- P/No: 806439
- Teradyne P/No: 090-362-00
- packing unit: 1 piece

**CapScan Vertical Amplifier pkg**

- P/No: 805283
- It includes
  - 1 amplifier board
  - 2 probes 805284
  - 2 receptacles 805287
- packing unit: 1 package

**Sensor Plate for Polarity Check**

- for SMT capacitors size B-C
- size: .248” x .147” (6,3 x 3,7mm)
- P/No: 805285
- packing unit: 10 pieces

**Sensor Plate for Polarity Check**

- for SMT capacitors size D
- size: .298” x .191” (7,6 x 4,9 mm)
- P/No: 805286
- packing unit: 10 pieces

**Assembled Vertical Polarity Check part**

- P/No of ECT Munich: SP-0074
- P/No of Dover/Hungary: 805283A-BC
- It includes
  - 2 spring probes 805284
  - 1 sensor plate B-C 805285
  - soldered to amplifier board 805283
- packing unit: 1 piece

**Assembled Vertical Polarity Check part**

- P/No of ECT Munich: SP-0075
- P/No of Dover/Hungary: 805283A-D
- It includes
  - 2 spring probes 805284
  - 1 sensor plate D 805286
  - soldered to amplifier board 805283
- packing unit: 1 piece
SPECIAL PRODUCTS
LED Analog Color Analyser 2 and 8 Channel

LEDCHECK™ II and LEDCHECK™ VIII are a modular assembly designed specifically for color testing light emitting diodes on printed circuit boards under test on automatic test equipment. Each module can accommodate 2 or 8 LED’s and modules can easily be cascaded should the need for additional channels arise.

Each channel measures true color of the LED under test, and provides an analog output to the test system proportional to the wavelength of the light detected from the LED. Using digital channel addressing, the channel selection is also under control of the test system.

While the color measurement system has good wavelength accuracy designed in, various factors influence the true accuracy of the measurement. The treatment of the fibers, peak versus dominant wavelength of the LED with clear, tinted, or diffused lens and temperature influence the measurement of color. The LEDCHECK color test module is not a spectrometer, but rather an inexpensive multi-channel color-measuring device with excellent repeatability. Once the hardware and measurement are setup, LEDCHECK can be relied upon to perform the color tests within the prescribed criteria.

Applications

- PCB LED Testing
- Automotive Dashboard / Brake Lights / Daytime running lights / Interior
- Switches with LED Backlighting
- Mobile Applications / Cell Phones / Backlighting
- Industrial and Medical Instruments
- Signalling
- Architectural Lighting

Key Features

- Designed for any Test Platforms due to analog output
- Tests the full spectrum of visible LED’s
- Tests Intensity from very dim to the brightest LED’s
- Unrivalled repeatability for color and intensity readings
- Available with 2 or 8 channels
- Allows up to 128 LED’s to test simultaneously with several modules
- Analog Interface with voltage readout
- Ease of Use – Instant on
- Excellent Technical Support
- Robust and small design

Specifications

| Mechanical | Board Dimensions (WxLxH) | 1.00” x 5.375” x 0.57” |
|           | (25,4mm x 136,5mm x 14,5mm) |
|           | Mounting Dimensions (WxL Ø) | 0.75” x 5.125” Ø 0.128” |
|           | (19mm x 130,2mm Ø 3,25mm) |
|           | Operating Temperature Range | 0°C to +50°C |

| Electrical | Supply Voltage | 5.0 V DC |
|           | Supply Current | < 60 mA |
|           | Interface | Analog Signal (Voltage) |

| Optical | Wavelength Range | 400 nm to 650 nm |
|         | Luminous Intensity | 1-2000 mcd |

| Accuracy | Accuracy per Channel | ± 3% |
|          | Accuracy Channel to Channel | ± 1% |

| Partnumber | Analog LEDCHECK II | 756927 |
|           | Analog LEDCHECK VIII | 756926 |

Analog LEDCHECK II and LEDCHECK VIII are a modular assembly designed specifically for color testing light emitting diodes on printed circuit boards under test on automatic test equipment. Each module can accommodate 2 or 8 LED’s and modules can easily be cascaded should the need for additional channels arise.

Each channel measures true color of the LED under test, and provides an analog output to the test system proportional to the wavelength of the light detected from the LED. Using digital channel addressing, the channel selection is also under control of the test system.

While the color measurement system has good wavelength accuracy designed in, various factors influence the true accuracy of the measurement. The treatment of the fibers, peak versus dominant wavelength of the LED with clear, tinted, or diffused lens and temperature influence the measurement of color. The LEDCHECK color test module is not a spectrometer, but rather an inexpensive multi-channel color-measuring device with excellent repeatability. Once the hardware and measurement are setup, LEDCHECK can be relied upon to perform the color tests within the prescribed criteria.

Applications

- PCB LED Testing
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Specifications

| Mechanical | Board Dimensions (WxLxH) | 1.00” x 5.375” x 0.57” |
|           | (25,4mm x 136,5mm x 14,5mm) |
|           | Mounting Dimensions (WxL Ø) | 0.75” x 5.125” Ø 0.128” |
|           | (19mm x 130,2mm Ø 3,25mm) |
|           | Operating Temperature Range | 0°C to +50°C |

| Electrical | Supply Voltage | 5.0 V DC |
|           | Supply Current | < 60 mA |
|           | Interface | Analog Signal (Voltage) |

| Optical | Wavelength Range | 400 nm to 650 nm |
|         | Luminous Intensity | 1-2000 mcd |

| Accuracy | Accuracy per Channel | ± 3% |
|          | Accuracy Channel to Channel | ± 1% |

| Partnumber | Analog LEDCHECK II | 756927 |
|           | Analog LEDCHECK VIII | 756926 |

LED Analog Color Analyser 2 and 8 Channel

LEDCHECK™ II and LEDCHECK™ VIII are a modular assembly designed specifically for color testing light emitting diodes on printed circuit boards under test on automatic test equipment. Each module can accommodate 2 or 8 LED’s and modules can easily be cascaded should the need for additional channels arise.

Each channel measures true color of the LED under test, and provides an analog output to the test system proportional to the wavelength of the light detected from the LED. Using digital channel addressing, the channel selection is also under control of the test system.

While the color measurement system has good wavelength accuracy designed in, various factors influence the true accuracy of the measurement. The treatment of the fibers, peak versus dominant wavelength of the LED with clear, tinted, or diffused lens and temperature influence the measurement of color. The LEDCHECK color test module is not a spectrometer, but rather an inexpensive multi-channel color-measuring device with excellent repeatability. Once the hardware and measurement are setup, LEDCHECK can be relied upon to perform the color tests within the prescribed criteria.

Applications

- PCB LED Testing
- Automotive Dashboard / Brake Lights / Daytime running lights / Interior
- Switches with LED Backlighting
- Mobile Applications / Cell Phones / Backlighting
- Industrial and Medical Instruments
- Signalling
- Architectural Lighting

Key Features

- Designed for any Test Platforms due to analog output
- Tests the full spectrum of visible LED’s
- Tests Intensity from very dim to the brightest LED’s
- Unrivalled repeatability for color and intensity readings
- Available with 2 or 8 channels
- Allows up to 128 LED’s to test simultaneously with several modules
- Analog Interface with voltage readout
- Ease of Use – Instant on
- Excellent Technical Support
- Robust and small design

Specifications

| Mechanical | Board Dimensions (WxLxH) | 1.00” x 5.375” x 0.57” |
|           | (25,4mm x 136,5mm x 14,5mm) |
|           | Mounting Dimensions (WxL Ø) | 0.75” x 5.125” Ø 0.128” |
|           | (19mm x 130,2mm Ø 3,25mm) |
|           | Operating Temperature Range | 0°C to +50°C |

| Electrical | Supply Voltage | 5.0 V DC |
|           | Supply Current | < 60 mA |
|           | Interface | Analog Signal (Voltage) |

| Optical | Wavelength Range | 400 nm to 650 nm |
|         | Luminous Intensity | 1-2000 mcd |

| Accuracy | Accuracy per Channel | ± 3% |
|          | Accuracy Channel to Channel | ± 1% |

| Partnumber | Analog LEDCHECK II | 756927 |
|           | Analog LEDCHECK VIII | 756926 |

LED Analog Color Analyser 2 and 8 Channel

LEDCHECK™ II and LEDCHECK™ VIII are a modular assembly designed specifically for color testing light emitting diodes on printed circuit boards under test on automatic test equipment. Each module can accommodate 2 or 8 LED’s and modules can easily be cascaded should the need for additional channels arise.

Each channel measures true color of the LED under test, and provides an analog output to the test system proportional to the wavelength of the light detected from the LED. Using digital channel addressing, the channel selection is also under control of the test system.

While the color measurement system has good wavelength accuracy designed in, various factors influence the true accuracy of the measurement. The treatment of the fibers, peak versus dominant wavelength of the LED with clear, tinted, or diffused lens and temperature influence the measurement of color. The LEDCHECK color test module is not a spectrometer, but rather an inexpensive multi-channel color-measuring device with excellent repeatability. Once the hardware and measurement are setup, LEDCHECK can be relied upon to perform the color tests within the prescribed criteria.

Applications

- PCB LED Testing
- Automotive Dashboard / Brake Lights / Daytime running lights / Interior
- Switches with LED Backlighting
- Mobile Applications / Cell Phones / Backlighting
- Industrial and Medical Instruments
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- Architectural Lighting

Key Features

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- Available with 2 or 8 channels
- Allows up to 128 LED’s to test simultaneously with several modules
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- Ease of Use – Instant on
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- Robust and small design

Specifications

| Mechanical | Board Dimensions (WxLxH) | 1.00” x 5.375” x 0.57” |
|           | (25,4mm x 136,5mm x 14,5mm) |
|           | Mounting Dimensions (WxL Ø) | 0.75” x 5.125” Ø 0.128” |
|           | (19mm x 130,2mm Ø 3,25mm) |
|           | Operating Temperature Range | 0°C to +50°C |

| Electrical | Supply Voltage | 5.0 V DC |
|           | Supply Current | < 60 mA |
|           | Interface | Analog Signal (Voltage) |

| Optical | Wavelength Range | 400 nm to 650 nm |
|         | Luminous Intensity | 1-2000 mcd |

| Accuracy | Accuracy per Channel | ± 3% |
|          | Accuracy Channel to Channel | ± 1% |

| Partnumber | Analog LEDCHECK II | 756927 |
|           | Analog LEDCHECK VIII | 756926 |
The Optical Fiber Cable includes a fastening kit to support each fiber cable to the adapter. The LEDCHECK Module end of the fiber cable is only being cut in length, making it easy to adjust and attach the fiber cable to the module. The light source end of the cable comes with different length metal tubes (tips) as listed below.

**Technical Details**
- Fiber Cable Outer Diameter: 0.087” (2.20 mm)
- Fiber Cable Length: 27” (680 mm)
- Metal Tube Length: 0.75” (19 mm)
- Metal Tube Length: 1.25” (31 mm)
- Metal Tube Length: 2.00” (50 mm)

**Part Numbers**
- Optical Fiber Cable 0.75” long Tube: 756309
- Optical Fiber Cable 1.25” long Tube: 756307
- Optical Fiber Cable 2.00” long Tube: 756308
**Digital Color Analyser**

**Digital LEDCHECK 3 or 5 Channel**

The ECT Digital Color Analyzer allows fast and automatic testing the Color and Brightness (Intensity) of Light Emitting Devices (LEDs). Tests the full spectrum of visible LEDs from very dim to the brightest on the market.

The new digital color sensor allows unrivalled repeatability for color and intensity testing.

**Applications**
- PCB LED Testing
- Automotive Dashboard / Brake Lights, Daytime running lights / Interior
- Switches with LED Backlighting
- Mobile Applications - Cell Phones, Backlighting
- Industrial and Medical Instruments
- Signalling
- Architectural Lighting

**Key Features**
- Designed for any Test Platforms
- Tests the full spectrum of visible LEDs
- Tests Intensity from very dim to the brightest LEDs
- Unrivalled repeatability for color and intensity readings
- Available with 3 or 5 channels
- Allows up to 495 LEDs to test simultaneously
- Ease of Use – Instant on
- Excellent Technical Support
- Free Drivers and Software
- Designed for Testing Color and White LEDs
- Tests Bicolor and Tricolor LEDs
- RS 232 and USB Interface
- Robust and reliable design
- Uses flexible plastic Optical Fibres for ease of installation

### Specifications LEDCHECK with 1mm Fiber

<table>
<thead>
<tr>
<th>Mechanical</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Board Dimensions (WxLxH)</td>
<td>70 x 65 x 35mm</td>
</tr>
<tr>
<td>Optical Fiber Length</td>
<td>600 mm</td>
</tr>
<tr>
<td>Fiber Outer diameter including cladding</td>
<td>1,00 mm</td>
</tr>
<tr>
<td>Number of Optical Fibers</td>
<td>3 or 5 pieces</td>
</tr>
<tr>
<td>Tightest bend radius of Fiber</td>
<td>15 mm</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>0°C to +50°C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electrical</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply Voltage</td>
<td>5,0 V</td>
</tr>
<tr>
<td>Supply Current</td>
<td>80 mA</td>
</tr>
<tr>
<td>Interface</td>
<td>RS232 (Serial) and USB</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Optical</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Peak Efficiency Wavelength</td>
<td>615 nm</td>
</tr>
<tr>
<td>Green Peak Efficiency Wavelength</td>
<td>540 nm</td>
</tr>
<tr>
<td>Blue Peak Efficiency Wavelength</td>
<td>465 nm</td>
</tr>
<tr>
<td>Total Operating Wavelength Range</td>
<td>450 nm to 650 nm</td>
</tr>
</tbody>
</table>

**Accuracy**

- White \( x = \pm 0,0015, \ y = \pm 0,0015 \)
- Red (615nm) \( \pm 3 \) nm
- Green (540nm) \( \pm 4 \) nm
- Blue (465nm) \( \pm 3 \) nm

<table>
<thead>
<tr>
<th>Partnumber</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LEDC-3-1</td>
<td>Digital LEDCHECK III</td>
</tr>
<tr>
<td>LEDC-5-1</td>
<td>Digital LEDCHECK V</td>
</tr>
</tbody>
</table>

### Specifications LEDCHECK with 2.2mm Fiber

Same as above with the exception that the fiber optic cable diameter is increased to 2,2mm for improved light intensity measurements.

<table>
<thead>
<tr>
<th>Mechanical</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Optical Fiber Length</td>
<td>600 mm</td>
</tr>
<tr>
<td>Fiber Outer diameter including cladding</td>
<td>2,20 mm</td>
</tr>
<tr>
<td>Number of Optical Fibers</td>
<td>3 or 5 pieces</td>
</tr>
<tr>
<td>Tightest bend radius of Fiber</td>
<td>17,6 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Partnumber</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LEDC-3-2</td>
<td>Digital LEDCHECK III</td>
</tr>
<tr>
<td>LEDC-5-2</td>
<td>Digital LEDCHECK V</td>
</tr>
</tbody>
</table>
### Optical Head

The Optical Head has been designed to reduce the placement sensitivity of the Optical Fiber when testing LED’s.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optical Head Outer diameter</td>
<td>4.55 mm</td>
</tr>
<tr>
<td>Optic capture angle</td>
<td>12 degrees</td>
</tr>
<tr>
<td>Optical Fiber Outer diameter</td>
<td>1.00 mm</td>
</tr>
</tbody>
</table>

#### Part Numbers

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>OH - 1</td>
<td>Optical Head Outer diameter</td>
<td>36.75 mm</td>
</tr>
<tr>
<td>OH - 2</td>
<td>Optical Head Outer diameter</td>
<td>27.00 mm</td>
</tr>
<tr>
<td>OH - 3</td>
<td>Optical Head Outer diameter, with Fiber Clamp</td>
<td>49.50 mm</td>
</tr>
</tbody>
</table>

### Optical Fiber Clamp

Attachment for positioning the thin fiber with 1mm outside diameter

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC - 1</td>
<td>Fiber Clamp for 1.0 mm Optical Fiber</td>
</tr>
<tr>
<td>CC - 2</td>
<td>Fiber Clamp for 2.2 mm Optical Fiber</td>
</tr>
</tbody>
</table>

### Optical Fiber Receptacle

75 mil receptacle with pressring
75 mil receptacle for positioning the 1mm Optical fiber

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTR-1W</td>
<td>Receptacle</td>
</tr>
</tbody>
</table>

### Optical Fiber Knife

Cutting tool for the optical fiber 1.0 mm and 2.2 mm fiber can be shortened with a fiber knife to the correct length.

In order to guarantee a clean cut of the fiber it is recommended to use each cutting hole only once.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFK - 2</td>
<td>Optical Fiber Knife</td>
</tr>
</tbody>
</table>
Board Marker Probe

The BMP-1 Board Marker Probe patented design is for installation on bare board or loaded board test fixtures. When your tester is equipped with the appropriate electronics and software, the BMP-1 scribes a permanent .050” circle on every “passed” PCB tested. Boards that fail the test are not marked. The risk of human error is eliminated in PCB testing and sorting.

The unit requires less than .500” of fixture area. It is designed to mark board areas of bare glass (FR4), solder mask over glass or copper, or bare tinned copper.

The BMP-1 includes a mounting receptacle with press ring, and a motor/transmission assembly. It can be easily removed from the receptacle for use in other fixtures. Spare receptacles and tip replacement assemblies are available. The thread between receptacle and housing is 7/16-20 UNF.

Consult factory for information on electronic and software requirements, and replacement receptacles and tip assemblies.

Probe Specifications BMP-1

<table>
<thead>
<tr>
<th>Mechanical</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Marker Tip Travel</td>
<td>.062 (1.57)</td>
</tr>
<tr>
<td>Recommended Working Travel</td>
<td>.050 (1.27)</td>
</tr>
<tr>
<td>Direction of Rotation</td>
<td>CCW</td>
</tr>
<tr>
<td>Scribed Diameter</td>
<td>.50 (1.27)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electrical (Operating Conditions)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Rating</td>
<td>50 mA</td>
</tr>
<tr>
<td>Voltage Rating</td>
<td>15 VDC</td>
</tr>
<tr>
<td>Recommended Duty Cycle</td>
<td>1 sec. On (min.), 5 sec. Off</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Materials and Finishes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Plunger Tip</td>
<td>Carbide</td>
</tr>
<tr>
<td>Receptacle</td>
<td>Stainless steel</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mounting Hole Size</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>.468/.469 (11.89/11.91)</td>
<td></td>
</tr>
</tbody>
</table>

To Order

Specify model number of components or tools you require:

**BMP-1**: Probe and receptacle, wires and male + female connectors included, (-red, + black).

**BMR-1**: Receptacle only.

**BMT-1**: Tip replacement assembly for BMT-1.

**RIT-BMP**: Receptacle insertion tool for BMR-1.

**EXT-BMP**: Receptacle extraction tool for BMR-1.

Warning: Adequate thickness spacers MUST be used to limit board travel as shown. Failure to use proper spacers will allow probe to bottom out, stalling the motor and permanently damaging the marker probe.
Personality Pins

- P/No: PP-3070-S
- Agilent P/No: Mint Pins 44275P
- Packing unit: 200 pieces

Indicator Probe

This probe is a special use probe to check the probe stroke of a test fixture. Barrel deformations are located in the front of the assembly to hold the plunger after activation at its compressed positions. Subsequently the stroke of the test fixture can be measured. Thenafter, the plunger can be pulled back with tweezers to the extended position.

- P/No: POGO-25IP-C
- Typ. life expectation: 50 cycles
- To be used in size 25 receptacles like SPR-25W-x
- Packing unit: 10 pieces

Other dimensions 75 mil or 50 mil upon request.
**Test Connectors**

Test Connectors are typically used for Final or Functional Test, whereas the Test Connector is pneumatically driven into the test objects connector.

The Test Connectors are free floating or can be used with a self guiding block to pre-align the connector before engaging the test object.

All Test Connectors are designed and made with High Performance Plastic to assure high lifecycles of typical up to 100,000 insertions.

ECT offers a variety of other connector types, pin counts or custom cable length for:

- TAE
- Power DC (2.1mm Ø)
- LVDS
- RTX
- Various others...

**Note**

These “Made in Germany” Connectors are sold worldwide by ECT-Munich only.

---

**HDMI Connector**

<table>
<thead>
<tr>
<th>Model Number:</th>
<th>HDMI Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connectors:</td>
<td>19 Pins Gold Plated</td>
</tr>
<tr>
<td>Housing Material:</td>
<td>High Performance Plastic</td>
</tr>
<tr>
<td>Voltage Rating:</td>
<td>max. 40V</td>
</tr>
<tr>
<td>Wiring:</td>
<td>none / upon request</td>
</tr>
<tr>
<td>Part Number:</td>
<td>15.52.59.00.0</td>
</tr>
</tbody>
</table>
### 4-Pin Mini Western Connector (900mm cable)
- **Model Number:** 4-Pin Western Connector
- **Connectors:** 4 Pins Gold Plated
- **Housing Material:** High Performance Plastic
- **Voltage Rating:** max. 230V
- **Wiring:** 900mm Color Coded Ribbon Cable
- **Part Number:** 10.41.67.00.0

### 6-Pin Mini Western Connector (900mm cable)
- **Model Number:** 6-Pin Western Connector
- **Connectors:** 6 Pins Gold Plated
- **Housing Material:** High Performance Plastic
- **Voltage Rating:** max. 230V
- **Wiring:** 900mm Color Coded Ribbon Cable
- **Part Number:** 10.41.68.00.0

### 8-Pin Mini Western Connector (900mm cable)
- **Model Number:** 8-Pin Western Connector
- **Connectors:** 8 Pins Gold Plated
- **Housing Material:** High Performance Plastic
- **Voltage Rating:** max. 230V
- **Wiring:** 900mm Color Coded Ribbon Cable
- **Part Number:** 10.41.69.00.0

### 8-Pin Mini Western Connector (250mm cable)
- **Model Number:** 8-Pin Western Connector
- **Connectors:** 8 Pins Gold Plated
- **Housing Material:** High Performance Plastic
- **Voltage Rating:** max. 230V
- **Wiring:** 250mm Color Coded Ribbon Cable
- **Part Number:** 10.41.70.00.0

### 10-Pin Mini Western Connector (300mm cable)
- **Model Number:** 10-Pin Western Connector
- **Connectors:** 10 Pins Gold Plated
- **Housing Material:** High Performance Plastic
- **Voltage Rating:** max. 230V
- **Wiring:** 300mm Color Coded Ribbon Cable
- **Part Number:** 10.41.57.00.0
## USB Connectors

### 4-Pin USB Connector Type A
- **Model Number:** 4-Pin USB Connector Type A
- **Connectors:** 4 Pins Gold Plated
- **Housing Material:** High Performance Plastic
- **Electrical Rating:** max. 40V / max. 2.5A
- **Wiring:** none / upon request
- **Part Number:** 10.14.40.00.0

![4-Pin USB Connector Type A](image1)

### 4-Pin USB Connector Type B
- **Model Number:** 4-Pin USB Connector Type B
- **Connectors:** 4 Pins Gold Plated
- **Housing Material:** High Performance Plastic
- **Electrical Rating:** max. 40V
- **Wiring:** none / upon request
- **Part Number:** 10.14.46.00.0

![4-Pin USB Connector Type B](image2)

### 5-Pin USB Mini Connector
- **Model Number:** 5-Pin USB Mini Connector
- **Connectors:** 5 Pins Gold Plated
- **Housing Material:** High Performance Plastic
- **Electrical Rating:** max. 40V
- **Wiring:** none / upon request
- **Part Number:** 10.14.66.00.0

![5-Pin USB Mini Connector](image3)

### 5-Pin USB Mini Connector with Guiding Feature
- **Model Number:** 5-Pin USB Mini Connector Guiding
- **Connectors:** 5 Pins Gold Plated
- **Housing Material:** High Performance Plastic
- **Electrical Rating:** max. 40V
- **Wiring:** none / upon request
- **Part Number:** 10.14.67.00.0

![5-Pin USB Mini Connector with Guiding Feature](image4)

### 5-Pin USB Micro Connector
- **Model Number:** 5-Pin USB Micro Connector
- **Connectors:** 5 Pins Gold Plated
- **Housing Material:** High Performance Plastic
- **Electrical Rating:** max. 40V
- **Wiring:** none / upon request
- **Part Number:** 10.14.57.00.0

![5-Pin USB Micro Connector](image5)
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- Test interface boards
- Contactors for semiconductor integrated circuits
- Test handlers
- Bareboard test equipment

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E-mail: ectmuc@ectinfo.com
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