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# History analysis

## Device xmls deletions (03.05.2017)

### Scoregroups for additional channels

<Scoregroup scoregroupId=*"0"*>

<name>Dauer</name>

<symbol></symbol>

<unit>h</unit>

<active>true</active>

<score label=*"duration\_mm"* value=*"Gesamt"* type=*"String"* description=*"Zeitdauer"*/>

<property name=*"factor"* value=*"0.01666667"* type=*"Double"* description=*"interne Darstellung in Minuten"*/>

<property name=*"histo\_top\_placement"* value=*"true"* type=*"Boolean"*/>

<label>Zeitdauer der Log-Aufzeichnung</label>

</Scoregroup>

<Scoregroup scoregroupId=*"1"*>

<name>Zählerwerte</name>

<symbol></symbol>

<unit>Tsd</unit>

<active>false</active>

<score label=*"totalReadings"* value=*"Anzahl gelesene Werte"* type=*"String"* description=*"Anzahl gelesene Werte"*/>

<score label=*"sampledReadings"* value=*"Anzahl Stichprobe"* type=*"String"* description=*"Anzahl Stichprobe"*/>

<label>Anzahl von Messwerten</label>

</Scoregroup>

<Scoregroup scoregroupId=*"2"*>

<name>Versionen</name>

<symbol></symbol>

<unit></unit>

<active>false</active>

<score label=*"logDataVersion"* value=*"Gerät"* type=*"String"*/>

<score label=*"logDataExplorerVersion"* value=*"DataExplorer"* type=*"String"*/>

<score label=*"logFileVersion"* value=*"Log-Datei"* type=*"String"*/>

<label>Versionen der Aufzeichnungs- und Auswertesoftware</label>

</Scoregroup>

<Scoregroup scoregroupId=*"3"*>

<name>Datenmenge</name>

<symbol></symbol>

<unit>kiB</unit>

<active>false</active>

<score label=*"logRecordSetBytes"* value=*"Datensatzgröße"* type=*"String"*/>

<score label=*"logFileBytes"* value=*"Dateigröße"* type=*"String"*/>

<property name=*"factor"* value=*"0.9765625"* type=*"Double"* description=*"kiB conversion factor = 1000 / 1024"*/>

<label>Größe der Log-Aufzeichnung</label>

</Scoregroup>

<Scoregroup scoregroupId=*"4"*>

<name>Laufzeiten</name>

<symbol></symbol>

<unit>ms</unit>

<active>false</active>

<score label=*"elapsedHistoRecordSet\_ms"* value=*"Datensatz lesen"* type=*"String"*/>

<label>Rechnerlaufzeit bei der Auswertung der Log-Aufzeichnung</label>

</Scoregroup>

### Full set of settlements for HoTTAdapter

<Settlement settlementId="0">

<name>R\_i Peak deltaFactor Strom-</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="0" calculusType="ratio\_permille" unsigned="true" referenceGroupId="1" leveling="smooth\_minmax" referenceGroupIdDivisor="2" divisorLeveling="smooth\_minmax" deltaBasis="bothAvg" comment="Divide the voltage peak value by the current peak value. Determine the peak value by comparing the smoothed threshold extremum value with the smoothed reference and recovery extremum values."/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="1">

<name>R\_i Peak deltaFactor Strom+</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="1" calculusType="ratio\_permille" unsigned="true" referenceGroupId="1" leveling="smooth\_minmax" referenceGroupIdDivisor="2" divisorLeveling="smooth\_minmax" deltaBasis="bothAvg" comment="Divide the voltage peak value by the current peak value. Determine the peak value by comparing the smoothed threshold extremum value with the smoothed reference and recovery extremum values."/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="21" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="2">

<name>R\_i Peak Delta-Faktor Strom- Messzeitpunkt</name>

<symbol>t</symbol>

<unit>min</unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="0" figureType="time\_step\_sec" comment="Zeitpunkt der Messung des Stromeinbruchs"/>

</evaluation>

<property name="factor" value="0.01666667" type="Double" description="Umrechnung auf Minuten"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="3">

<name>R\_i Peak Delta-Faktor Strom+ Messzeitpunkt</name>

<symbol>t</symbol>

<unit>min</unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="1" figureType="time\_step\_sec" comment="Zeitpunkt der Messung der Stromspitze"/>

</evaluation>

<property name="factor" value="0.01666667" type="Double" description="Umrechnung auf Minuten"/>

<property name="scale\_sync\_ref\_ordinal" value="23" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="4">

<name>R\_i Peak deltaFactor Strom- Messdauer</name>

<symbol>t\_r</symbol>

<unit>sec</unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="0" figureType="time\_sum\_sec" comment="Dauer der Messung des Stromeinbruchs"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Darstellung als Sekunden"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="5">

<name>R\_i Peak deltaFactor Strom+ Messdauer</name>

<symbol>t\_r</symbol>

<unit>sec</unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="1" figureType="time\_sum\_sec" comment="Dauer der Messung der Stromspitze"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Darstellung als Sekunden"/>

<property name="scale\_sync\_ref\_ordinal" value="25" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="6">

<name>R\_i Peak deltaFactor Strom- Messungen</name>

<symbol>Anzahl</symbol>

<unit></unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="0" figureType="time\_sum\_sec" comment="Anzahl von Messungen von Stromeinbrüchen"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Keine Umrechnung"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

<trailDisplay discloseAll="true" defaultTrail="count"/>

</Settlement>

<Settlement settlementId="7">

<name>R\_i Peak deltaFactor Strom+ Messungen</name>

<symbol>Anzahl</symbol>

<unit></unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="1" figureType="time\_sum\_sec" comment="Anzahl von Messungen von Stromspitzen"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Keine Umrechnung"/>

<property name="scale\_sync\_ref\_ordinal" value="27" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

<trailDisplay discloseAll="true" defaultTrail="count"/>

</Settlement>

<Settlement settlementId="8">

<name>engineClimb</name>

<symbol>h</symbol>

<unit>m</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="2" calculusType="delta" unsigned="false" referenceGroupId="13" leveling="minmax" referenceGroupIdDivisor="1" deltaBasis="bothAvg" comment="Höhe aufsummieren"/>

</evaluation>

</Settlement>

<Settlement settlementId="9">

<name>Kapazität pro Höhenmeter</name>

<symbol>vh</symbol>

<unit>mAh/m</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="2" calculusType="ratio" unsigned="false" referenceGroupId="3" leveling="minmax" referenceGroupIdDivisor="13" divisorLeveling="minmax" deltaBasis="bothAvg" comment="delta Kapazität / delta Höhe"/>

</evaluation>

</Settlement>

<Settlement settlementId="10">

<name>R\_i Pulse deltaFactor Strom-</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="3" calculusType="ratio\_permille" unsigned="true" referenceGroupId="1" leveling="smooth\_minmax" referenceGroupIdDivisor="2" divisorLeveling="smooth\_minmax" deltaBasis="bothAvg" comment="Divide the voltage pulse value by the current pulse value. Determine the pulse value by comparing the smoothed threshold extremum value with the smoothed reference and recovery extremum values."/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="21" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="11">

<name>R\_i Pulse deltaFactor Strom+</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="4" calculusType="ratio\_permille" unsigned="true" referenceGroupId="1" leveling="smooth\_minmax" referenceGroupIdDivisor="2" divisorLeveling="smooth\_minmax" deltaBasis="bothAvg" comment="Divide the voltage pulse value by the current pulse value. Determine the pulse value by comparing the smoothed threshold extremum value with the smoothed reference and recovery extremum values."/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="21" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="12">

<name>R\_i Slope deltaFactor Strom-</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="6" calculusType="ratio\_permille" unsigned="true" referenceGroupId="1" leveling="smooth\_minmax" referenceGroupIdDivisor="2" divisorLeveling="smooth\_minmax" deltaBasis="reference" comment="Divide the voltage slope delta value by the current slope delta value. Determine the slope delta value by comparing the smoothed threshold extremum value with the smoothed reference values."/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="21" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="13">

<name>R\_i Slope deltaFactor Strom+</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="7" calculusType="ratio\_permille" unsigned="true" referenceGroupId="1" leveling="smooth\_minmax" referenceGroupIdDivisor="2" divisorLeveling="smooth\_minmax" deltaBasis="reference" comment="Divide the voltage slope delta value by the current slope delta value. Determine the slope delta value by comparing the smoothed threshold extremum value with the smoothed reference values."/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="21" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="14">

<name>R\_i Slope deltaFactor Strom- Messungen</name>

<symbol>Anzahl</symbol>

<unit></unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="6" figureType="time\_sum\_sec" comment="Anzahl von Messungen von Stromeinbrüchen"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Keine Umrechnung"/>

<property name="scale\_sync\_ref\_ordinal" value="27" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

<trailDisplay discloseAll="true" defaultTrail="count"/>

</Settlement>

<Settlement settlementId="15">

<name>R\_i Slope deltaFactor Strom+ Messungen</name>

<symbol>Anzahl</symbol>

<unit></unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="7" figureType="time\_sum\_sec" comment="Anzahl von Messungen von Stromanstiegen"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Keine Umrechnung"/>

<property name="scale\_sync\_ref\_ordinal" value="27" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

<trailDisplay discloseAll="true" defaultTrail="count"/>

</Settlement>

<Settlement settlementId="16">

<name>R\_i</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="100" calculusType="ratio\_permille" unsigned="true" referenceGroupId="1" leveling="smooth\_minmax" referenceGroupIdDivisor="2" divisorLeveling="smooth\_minmax" deltaBasis="bothAvg" comment="Divide the voltage peak value by the current peak value. Determine the peak value by comparing the smoothed threshold extremum value with the smoothed reference value (and recovery extremum value in case of peaks and pulses)."/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="21" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="17">

<name>R\_i Messzeitpunkt</name>

<symbol>t</symbol>

<unit>min</unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="100" figureType="time\_step\_sec" comment="Startzeitpunkt der Messung des Schwellwertes"/>

</evaluation>

<property name="factor" value="0.01666667" type="Double" description="Umrechnung auf Minuten"/>

<property name="scale\_sync\_ref\_ordinal" value="23" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

<trailDisplay discloseAll="false">

<exposed trail="count"/>

<disclosed trail="q2"/>

</trailDisplay>

</Settlement>

<Settlement settlementId="18">

<name>R\_i Messdauer</name>

<symbol>t\_r</symbol>

<unit>sec</unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="100" figureType="time\_sum\_sec" comment="Dauer der Messung des Schwellwertes"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Darstellung als Sekunden"/>

<property name="scale\_sync\_ref\_ordinal" value="25" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

<trailDisplay discloseAll="true" defaultTrail="q2"/>

</Settlement>

<Settlement settlementId="19">

<name>R\_i Messungen</name>

<symbol>Anzahl</symbol>

<unit></unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="100" figureType="time\_sum\_sec" comment="Anzahl von Messungen"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Keine Umrechnung"/>

<property name="scale\_sync\_ref\_ordinal" value="27" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

<trailDisplay discloseAll="true" defaultTrail="count"/>

</Settlement>

<Settlement settlementId="20">

<name>R\_i Zelle 1</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="100" calculusType="ratio\_permille" unsigned="true" referenceGroupId="6" leveling="smooth\_minmax" referenceGroupIdDivisor="2" divisorLeveling="smooth\_minmax" deltaBasis="bothAvg" comment="Voltage delta devided by current delta, based on the smoothed reference ad recovery levels average"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="21" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="21">

<name>R\_i Zelle 2</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="100" calculusType="ratio\_permille" unsigned="true" referenceGroupId="7" leveling="smooth\_minmax" referenceGroupIdDivisor="2" divisorLeveling="smooth\_minmax" deltaBasis="bothAvg" comment="Voltage delta devided by current delta, based on the smoothed reference ad recovery levels average"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="21" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="22">

<name>R\_i Zelle 3</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="100" calculusType="ratio\_permille" unsigned="true" referenceGroupId="8" leveling="smooth\_minmax" referenceGroupIdDivisor="2" divisorLeveling="smooth\_minmax" deltaBasis="bothAvg" comment="Voltage delta devided by current delta, based on the smoothed reference ad recovery levels average"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="21" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="23">

<name>R\_i Zelle 4</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="100" calculusType="ratio\_permille" unsigned="true" referenceGroupId="9" leveling="smooth\_minmax" referenceGroupIdDivisor="2" divisorLeveling="smooth\_minmax" deltaBasis="bothAvg" comment="Voltage delta devided by current delta, based on the smoothed reference ad recovery levels average"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="21" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="24">

<name>R\_i Zelle 5</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="100" calculusType="ratio\_permille" unsigned="true" referenceGroupId="10" leveling="smooth\_minmax" referenceGroupIdDivisor="2" divisorLeveling="smooth\_minmax" deltaBasis="bothAvg" comment="Voltage delta devided by current delta, based on the smoothed reference ad recovery levels average"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="21" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="25">

<name>R\_i Zelle 6</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="100" calculusType="ratio\_permille" unsigned="true" referenceGroupId="11" leveling="smooth\_minmax" referenceGroupIdDivisor="2" divisorLeveling="smooth\_minmax" deltaBasis="bothAvg" comment="Voltage delta devided by current delta, based on the smoothed reference ad recovery levels average"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="21" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="26">

<name>R\_i Zellen</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="100" calculusType="ratio\_permille" unsigned="true" referenceGroupId="200" leveling="smooth\_minmax" referenceGroupIdDivisor="2" divisorLeveling="smooth\_minmax" deltaBasis="bothAvg" comment="based on slope and peak transitions - this delivers the best results"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="21" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="27">

<name>R\_i Strom-Messwert</name>

<symbol>I</symbol>

<unit>A</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="100" calculusType="delta" unsigned="false" referenceGroupId="2" leveling="smooth\_minmax" referenceGroupIdDivisor="1" deltaBasis="bothAvg" comment="Current delta value used for Ri calculation. Minmax leveling is based on a minimum quantile; the delta value takes an average value from the reference and recovery levels and subtracts the threshold level value. For test only."/>

</evaluation>

<property name="factor" value="1" type="Double" description="Wert entspricht somit Ampere"/>

<property name="scale\_sync\_ref\_ordinal" value="2" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="28">

<name>R\_i relativer Strom-Messwert</name>

<symbol></symbol>

<unit>%</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="100" calculusType="relative\_delta\_percent" unsigned="false" referenceGroupId="2" leveling="smooth\_minmax" referenceGroupIdDivisor="1" deltaBasis="bothAvg" comment="A value close to 100% gives the best accuracy for Ri calculation. For test only"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient holds the current delta value devided by the current spread (= I\_max minus I\_min)"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

### Full set of settlements for UltraTrioPlus14

<Settlement settlementId="0">

<name>R\_i Peak Delta-Faktor</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="0" calculusType="ratio\_permille" unsigned="true" referenceGroupId="0" leveling="smooth\_minmax" referenceGroupIdDivisor="1" divisorLeveling="smooth\_minmax" deltaBasis="bothAvg" comment="Divide the voltage peak value by the current peak value. Determine the peak value by comparing the smoothed threshold extremum value with the smoothed reference and recovery extremum values."/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="1">

<name>R\_i Peak Delta-Faktor Messzeitpunkt</name>

<symbol>t</symbol>

<unit>min</unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="0" figureType="time\_step\_sec" comment="Zeitpunkt der Messung der Stromspitze"/>

</evaluation>

<property name="factor" value="0.01666667" type="Double" description="Umrechnung auf Minuten"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="2">

<name>R\_i Peak Delta-Faktor Messdauer</name>

<symbol>t\_r</symbol>

<unit>sec</unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="0" figureType="time\_sum\_sec" comment="Dauer der Messung der Stromspitze"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Darstellung als Sekunden"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="3">

<name>R\_i Peak Delta-Faktor Messungen</name>

<symbol>Anzahl</symbol>

<unit></unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="0" figureType="time\_step\_sec" comment="Wert wird nur als Grundlage für das Zählen benötigt"/>

</evaluation>

<property name="factor" value="1" type="Double"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

<trailDisplay discloseAll="true" defaultTrail="count"/>

</Settlement>

<Settlement settlementId="4">

<name>R\_i Peak Delta-Festwert</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="1" calculusType="ratio\_permille" unsigned="true" referenceGroupId="0" leveling="smooth\_minmax" referenceGroupIdDivisor="1" divisorLeveling="smooth\_minmax" deltaBasis="bothAvg" comment="Divide the voltage peak value by the current peak value. Determine the peak value by comparing the smoothed threshold extremum value with the smoothed reference and recovery extremum values."/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="13" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="5">

<name>R\_i Peak Trigger-Festwert</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="2" calculusType="ratio\_permille" unsigned="true" referenceGroupId="0" leveling="smooth\_minmax" referenceGroupIdDivisor="1" divisorLeveling="smooth\_minmax" deltaBasis="bothAvg" comment="Divide the voltage peak value by the current peak value. Determine the peak value by comparing the smoothed threshold extremum value with the smoothed reference and recovery extremum values."/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="13" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="6">

<name>R\_i Puls Delta-Faktor</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="3" calculusType="ratio\_permille" unsigned="true" referenceGroupId="0" leveling="smooth\_minmax" referenceGroupIdDivisor="1" divisorLeveling="smooth\_minmax" deltaBasis="bothAvg" comment="Divide the voltage peak value by the current peak value. Determine the peak value by comparing the smoothed threshold extremum value with the smoothed reference and recovery extremum values."/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="13" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="7">

<name>R\_i Puls Messdauer</name>

<symbol>t\_r</symbol>

<unit>sec</unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="3" figureType="time\_sum\_sec" comment="Dauer der Messung der Stromspitze"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Umrechnung auf Sekunden"/>

<property name="scale\_sync\_ref\_ordinal" value="14" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="8">

<name>R\_i Puls Delta-Festwert</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="4" calculusType="ratio\_permille" unsigned="true" referenceGroupId="0" leveling="smooth\_minmax" referenceGroupIdDivisor="1" divisorLeveling="smooth\_minmax" deltaBasis="bothAvg" comment="Divide the voltage peak value by the current peak value. Determine the peak value by comparing the smoothed threshold extremum value with the smoothed reference and recovery extremum values."/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="13" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="9">

<name>R\_i Puls Trigger-Festwert</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="5" calculusType="ratio\_permille" unsigned="true" referenceGroupId="0" leveling="smooth\_minmax" referenceGroupIdDivisor="1" divisorLeveling="smooth\_minmax" deltaBasis="bothAvg" comment="Divide the voltage peak value by the current peak value. Determine the peak value by comparing the smoothed threshold extremum value with the smoothed reference and recovery extremum values."/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="13" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="10">

<name>R\_i Slope Delta-Faktor</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="6" calculusType="ratio\_permille" unsigned="true" referenceGroupId="0" leveling="smooth\_minmax" referenceGroupIdDivisor="1" divisorLeveling="smooth\_minmax" deltaBasis="reference" comment="Divide the voltage peak value by the current peak value. Determine the peak value by comparing the smoothed threshold extremum value with the smoothed reference and recovery extremum values."/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="13" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="11">

<name>R\_i Slope Delta-Faktor Messzeitpunkt</name>

<symbol>t</symbol>

<unit>min</unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="6" figureType="time\_step\_sec" comment="Zeitpunkt der Messung der Stromspitze"/>

</evaluation>

<property name="factor" value="0.01666667" type="Double" description="Umrechnung auf Minuten"/>

<property name="scale\_sync\_ref\_ordinal" value="14" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="12">

<name>R\_i Slope Delta-Faktor Messdauer</name>

<symbol>t\_r</symbol>

<unit>sec</unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="6" figureType="time\_sum\_sec" comment="Dauer der Messung der Stromspitze"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Umrechnung auf Sekunden"/>

<property name="scale\_sync\_ref\_ordinal" value="15" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="13">

<name>R\_i Slope Delta-Faktor Messungen</name>

<symbol>Anzahl</symbol>

<unit></unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="6" figureType="time\_step\_sec" comment="Wert wird nur als Grundlage für das Zählen benötigt"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Keine Umrechnung"/>

<property name="scale\_sync\_ref\_ordinal" value="16" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

<trailDisplay discloseAll="true" defaultTrail="count"/>

</Settlement>

<Settlement settlementId="14">

<name>R\_i Slope Delta-Festwert</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="7" calculusType="ratio\_permille" unsigned="true" referenceGroupId="0" leveling="smooth\_minmax" referenceGroupIdDivisor="1" divisorLeveling="smooth\_minmax" deltaBasis="reference" comment="Divide the voltage peak value by the current peak value. Determine the peak value by comparing the smoothed threshold extremum value with the smoothed reference and recovery extremum values."/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="13" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="15">

<name>R\_i Slope Trigger-Festwert</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="8" calculusType="ratio\_permille" unsigned="true" referenceGroupId="0" leveling="smooth\_minmax" referenceGroupIdDivisor="1" divisorLeveling="smooth\_minmax" deltaBasis="reference" comment="Divide the voltage peak value by the current peak value. Determine the peak value by comparing the smoothed threshold extremum value with the smoothed reference and recovery extremum values."/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="13" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="16">

<name>R\_i Delta-Faktor</name>

<symbol>Ri</symbol>

<unit>mOhm</unit>

<active>true</active>

<evaluation>

<transitionCalculus transitionGroupId="100" calculusType="ratio\_permille" unsigned="true" referenceGroupId="0" leveling="smooth\_minmax" referenceGroupIdDivisor="1" divisorLeveling="smooth\_minmax" deltaBasis="bothAvg" comment="Divide the voltage peak value by the current peak value. Determine the peak value by comparing the smoothed threshold extremum value with the smoothed reference and recovery extremum values."/>

</evaluation>

<property name="factor" value="1" type="Double" description="Quotient wird in Promille geliefert und entspricht somit milliOhm"/>

<property name="scale\_sync\_ref\_ordinal" value="13" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="17">

<name>R\_i Delta-Faktor Messzeitpunkt</name>

<symbol>t</symbol>

<unit>min</unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="100" figureType="time\_step\_sec" comment="Zeitpunkt der Messung des Schwellwertes"/>

</evaluation>

<property name="factor" value="0.01666667" type="Double" description="Umrechnung auf Minuten"/>

<property name="scale\_sync\_ref\_ordinal" value="14" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="18">

<name>R\_i Delta-Faktor Messdauer</name>

<symbol>t\_r</symbol>

<unit>sec</unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="100" figureType="time\_sum\_sec" comment="Dauer der Messung des Schwellwertes"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Umrechnung auf Sekunden"/>

<property name="scale\_sync\_ref\_ordinal" value="15" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

</Settlement>

<Settlement settlementId="19">

<name>R\_i Delta-Faktor Messungen</name>

<symbol>Anzahl</symbol>

<unit></unit>

<active>true</active>

<evaluation>

<transitionFigure transitionGroupId="100" figureType="time\_step\_sec" comment="Anzahl von Messungen"/>

</evaluation>

<property name="factor" value="1" type="Double" description="Keine Umrechnung"/>

<property name="scale\_sync\_ref\_ordinal" value="16" type="Integer"/>

<property name="histo\_top\_placement" value="true" type="Boolean"/>

<trailDisplay discloseAll="true" defaultTrail="count"/>

</Settlement>